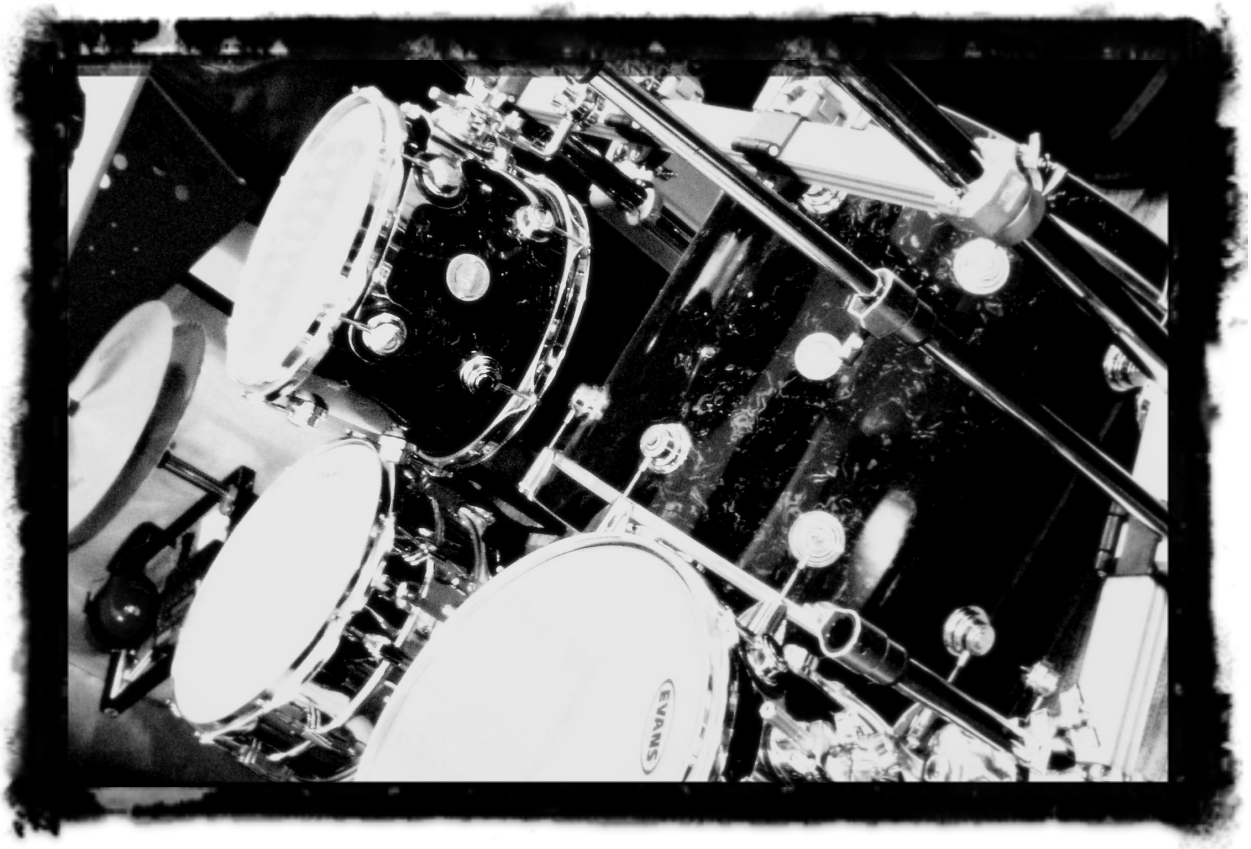
Drumset in Mathematics

An Invaluable Companion in Studies

– The Applications –



by

Gianpaolo Gallian

To Mom & Dad
and all my masters up above

Drumset in Mathematics - An Invaluable Companion in Studies - The Applications
by Gianpaolo Gallian

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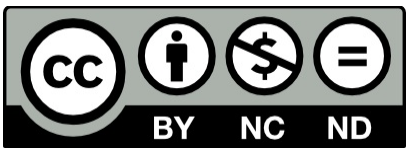

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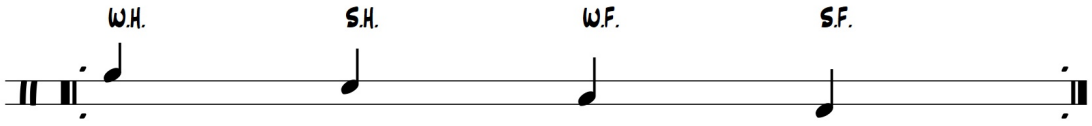
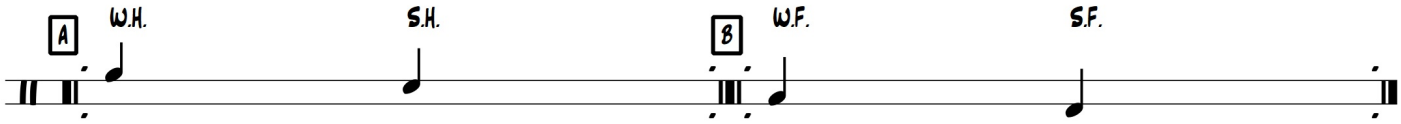
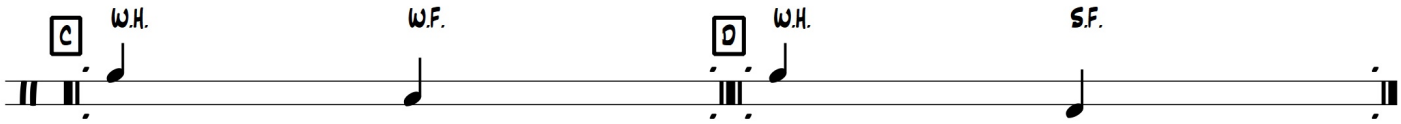
And finally, a big thank you to my parents, to whom this work is dedicated, for giving me the chance to do it. I love you!

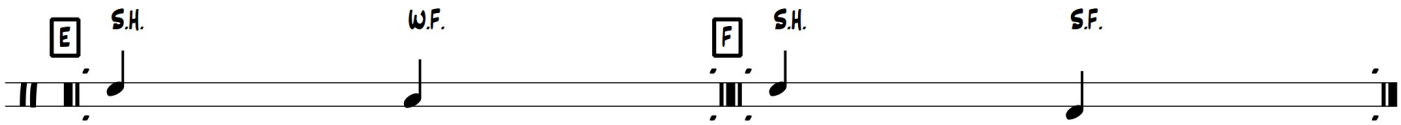
Key

All-Around Key

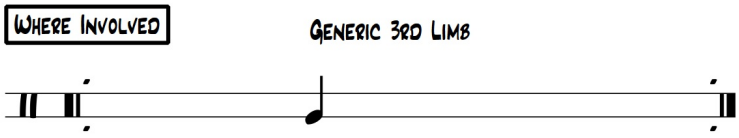








Where Involved



W.H.=Weak Hand

S.H.=Strong Hand

W.F.=Weak Foot

S.F.=Strong Foot

Introduction

Hello, drummers, and welcome to this second volume of the series "Drumset in Mathematics – An Invaluable Companion in Studies"! This time we will be presenting 4-limb applications of the concepts explained in Chapters 1, 2 & 3 of the first volume. This will basically work as an exercise book for practice, where you can keep record of your daily work. Of course, some of the applications discussed in Chapter 4 of the first volume, including "Patterns On Polyrhythms" and "Metric Modulation", won't be discussed here, since they alone would require an entire book just for the purpose. As you will see, there will be much less text and much more music, since the concepts have already been laid out and explained. This time will be practice time, so let's get started!

How This Method Works

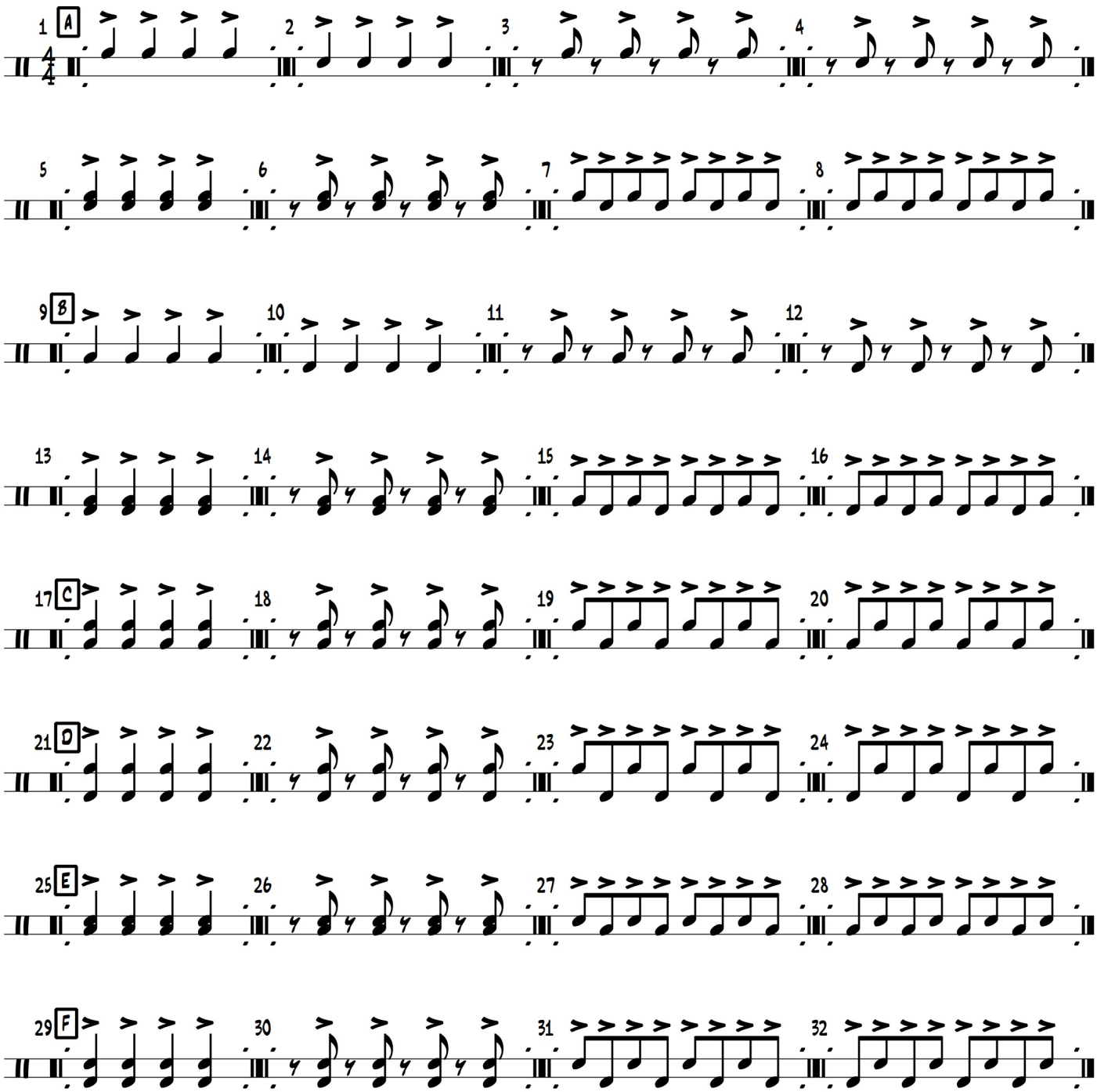
You might have noticed the key (or legend) at the beginning of this book: each and every one of the limbs is indicated, starting from the weak hand all the way to the strong foot, since this time we will go through all of the exercises using all four limbs. However, since this book will deal primarily with 2-way melodic & harmonic coordination (with the exception of Chapter 3, that will imply some basic 3-way harmonic/melodic coordination), the limbs to practice have been divided into groups, indicated by a boxed letter, running from **A** to **F**. So, if the exercises indicated by letter **A** will be played with the Weak Hand & the Strong Hand, exercises indicated by letter **B** will be played with the Weak Foot & the Strong Foot, and so on: just follow the indications! You will see that each of the exercises in Chapters 1 & 2 has been re-written extensively for each group, while the exercises in Chapter 3 have been written down just once, with the indication to be played with groups from **A** to **F** each time through. Again, just follow the indications!

Practice Suggestions

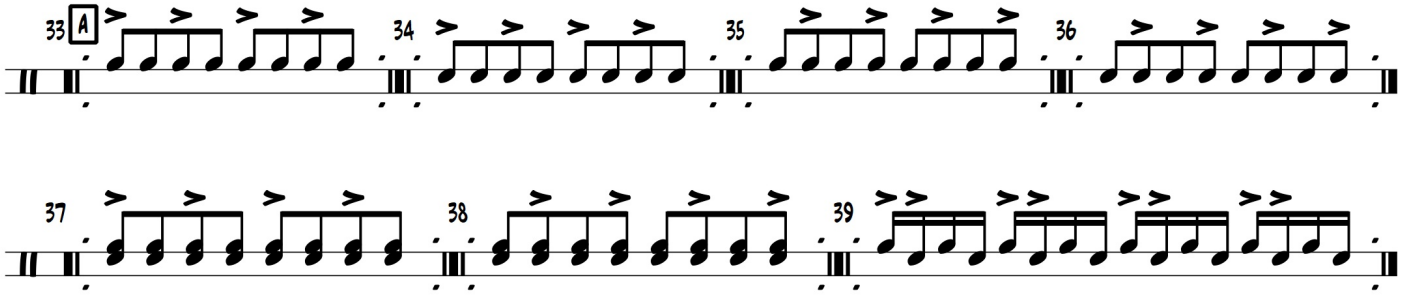
Practice each repeated section of music alone until the necessary motions are memorized by the muscles and start to "play themselves", then move on to the next one. For the exercises in Chapter 3, keep the fundamental beat as indicated with a 3rd limb of your choice. For instance, if you play the exercise with limb group **A** (WH, SH), keep the beat with a foot of your choice. The metronome should be used only for the purpose of establishing a consistent tempo, and never to force the drummer to run after it, getting tensed and fatigued. Remember to use practice as a meditation: relax and let the limbs move the way they want to, not the way you think they should. Even though the exercises are conceptually simple, nothing can replace the guide of a good instructor: see if you can find one in the nearby.

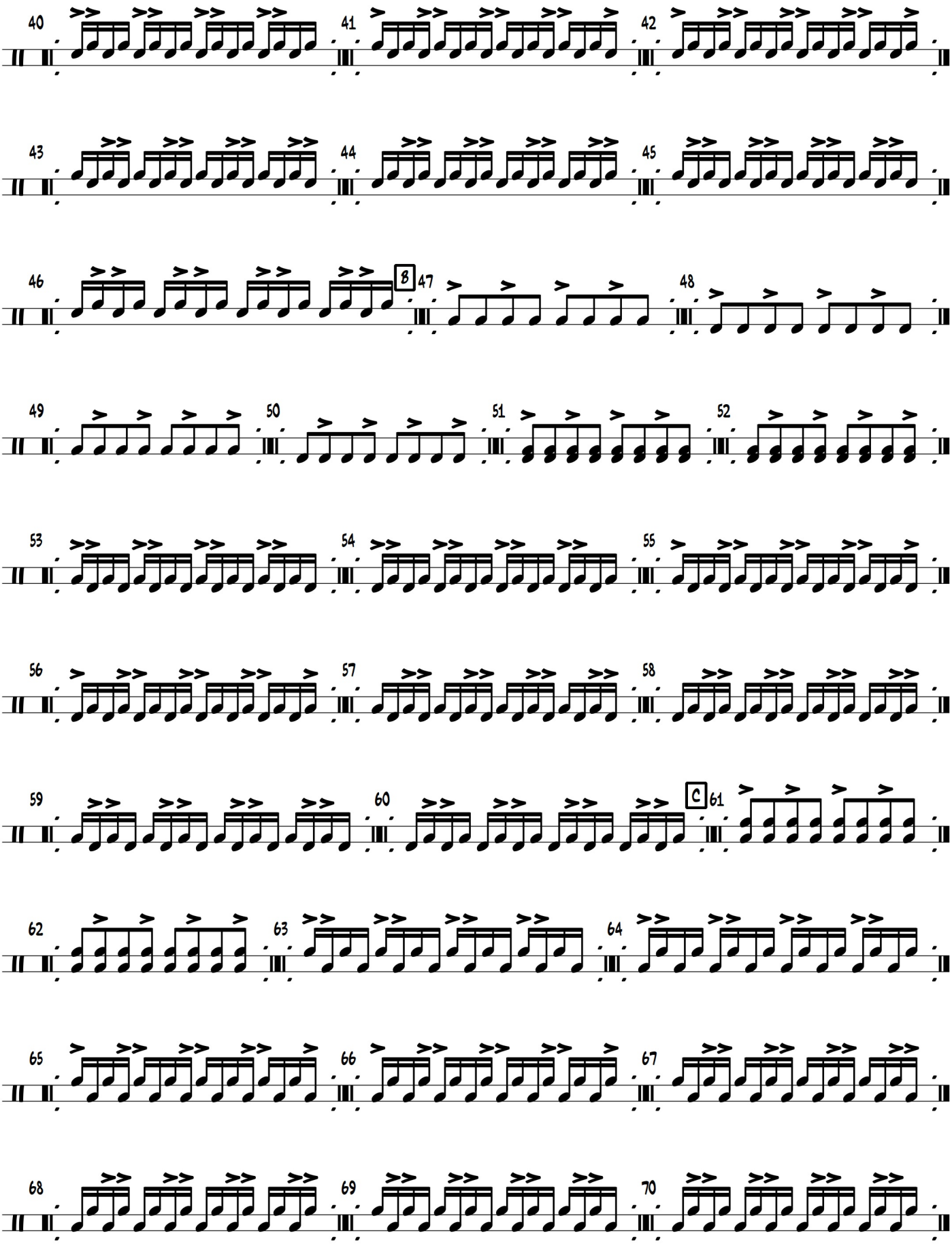
Chapter 1 - The Four Basic Strokes

Single Stroke



Double Stroke

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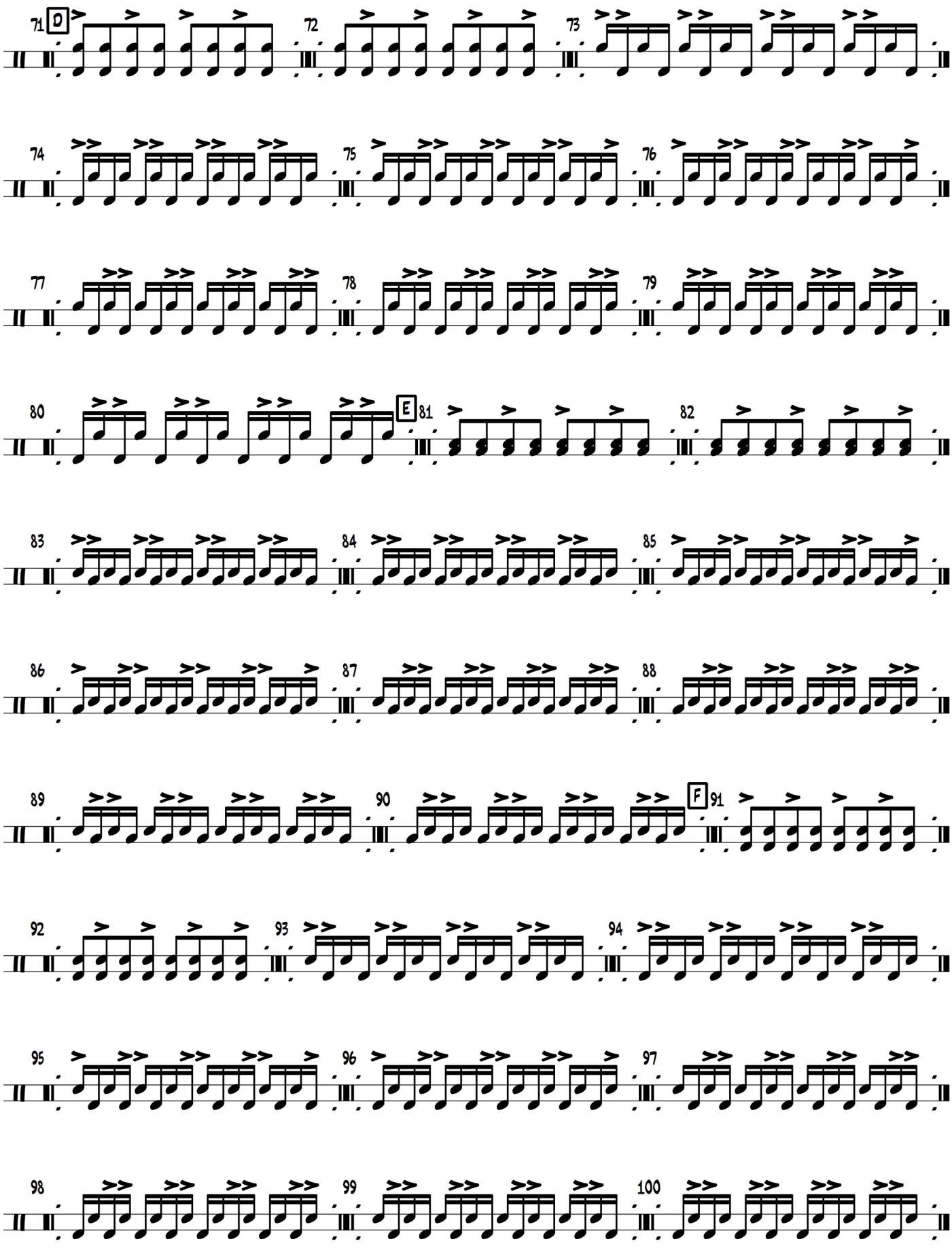
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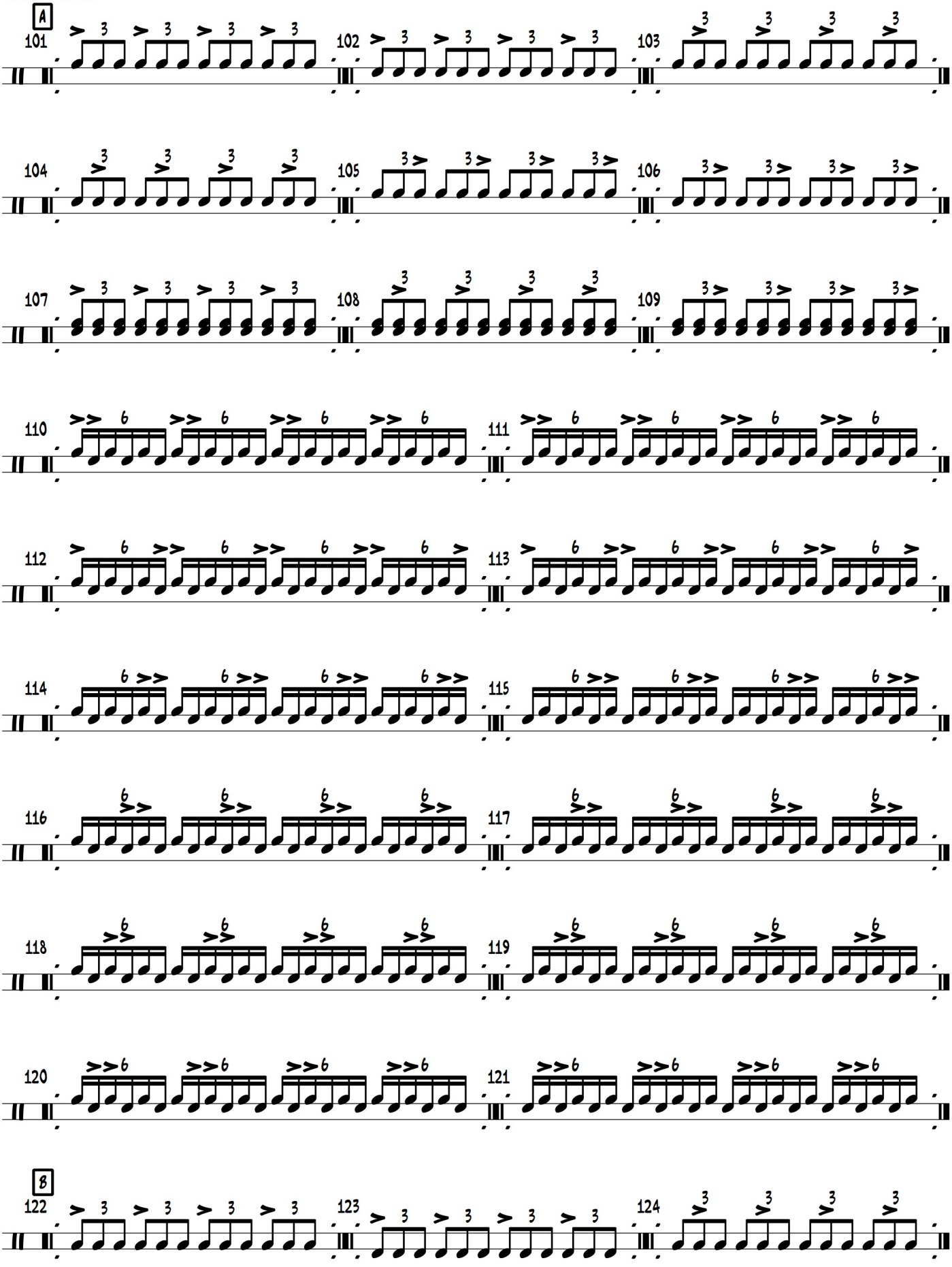
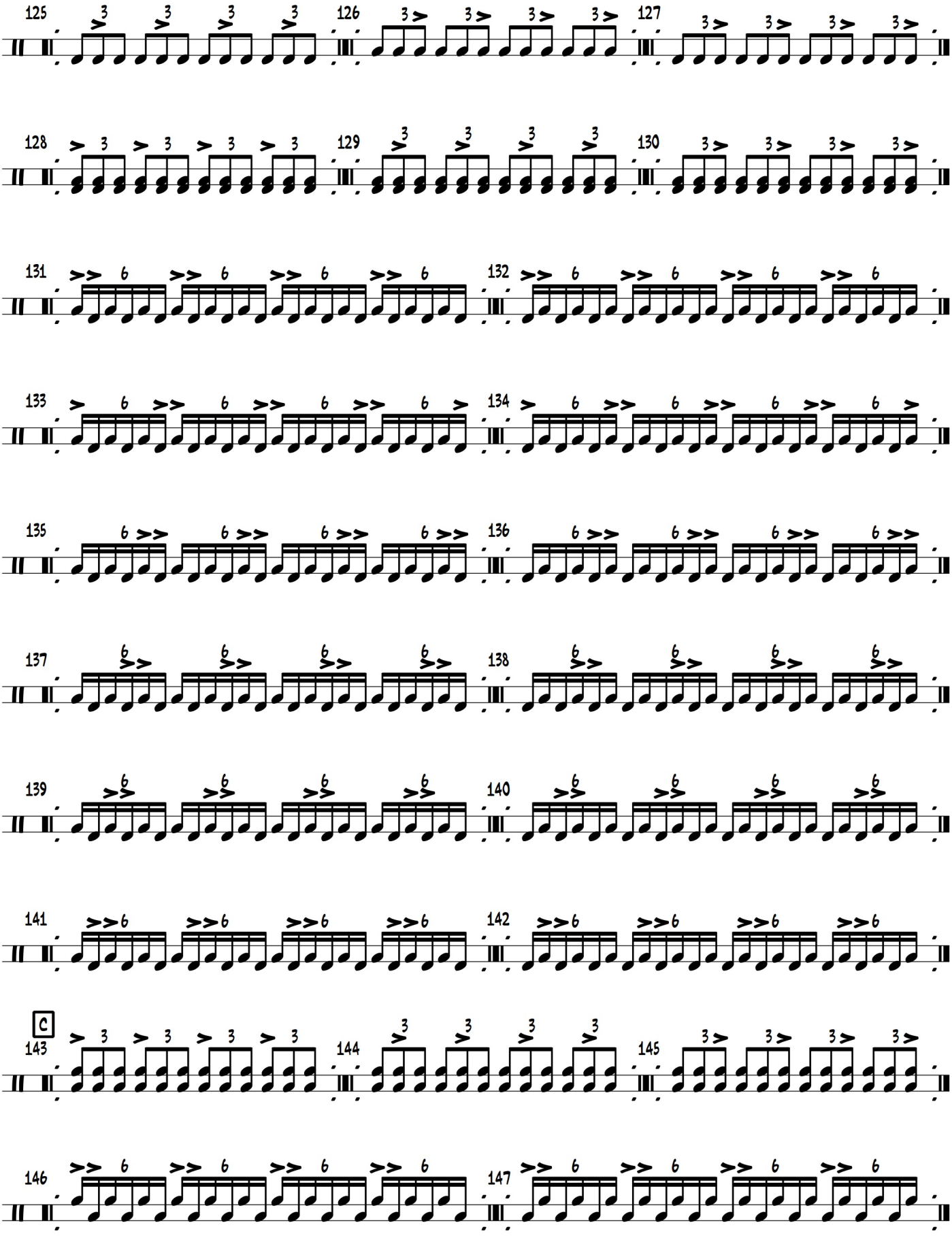
Triple Stroke

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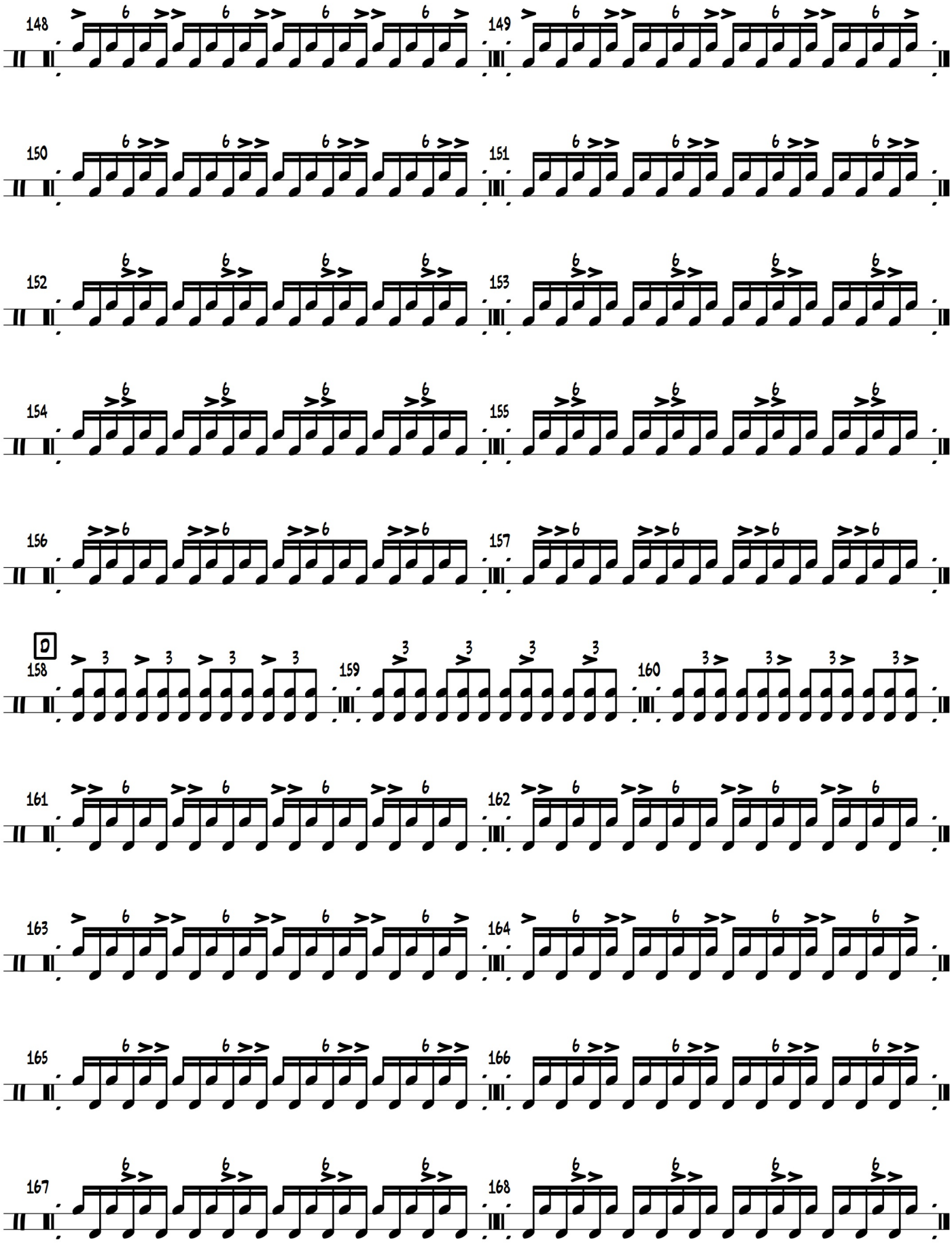
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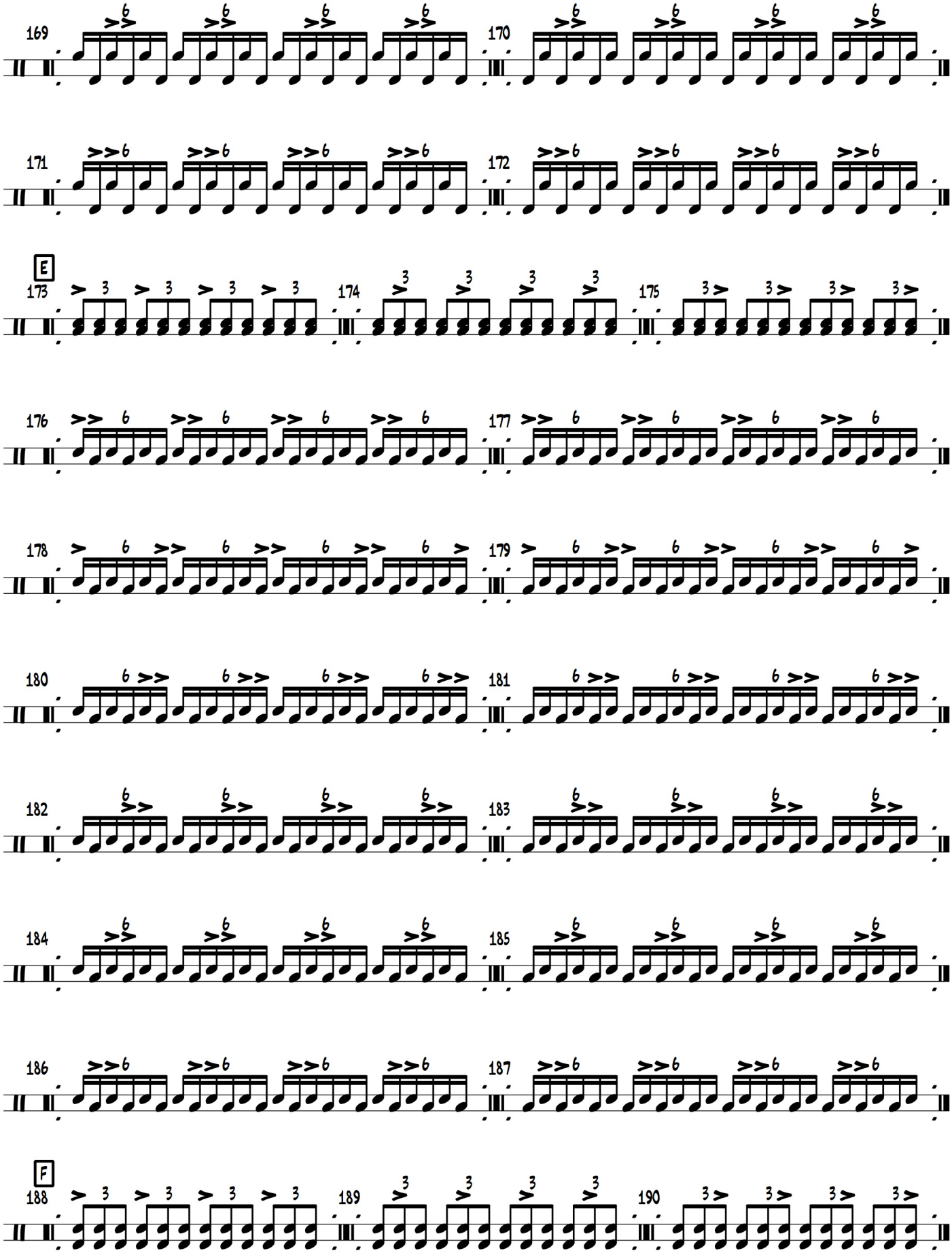
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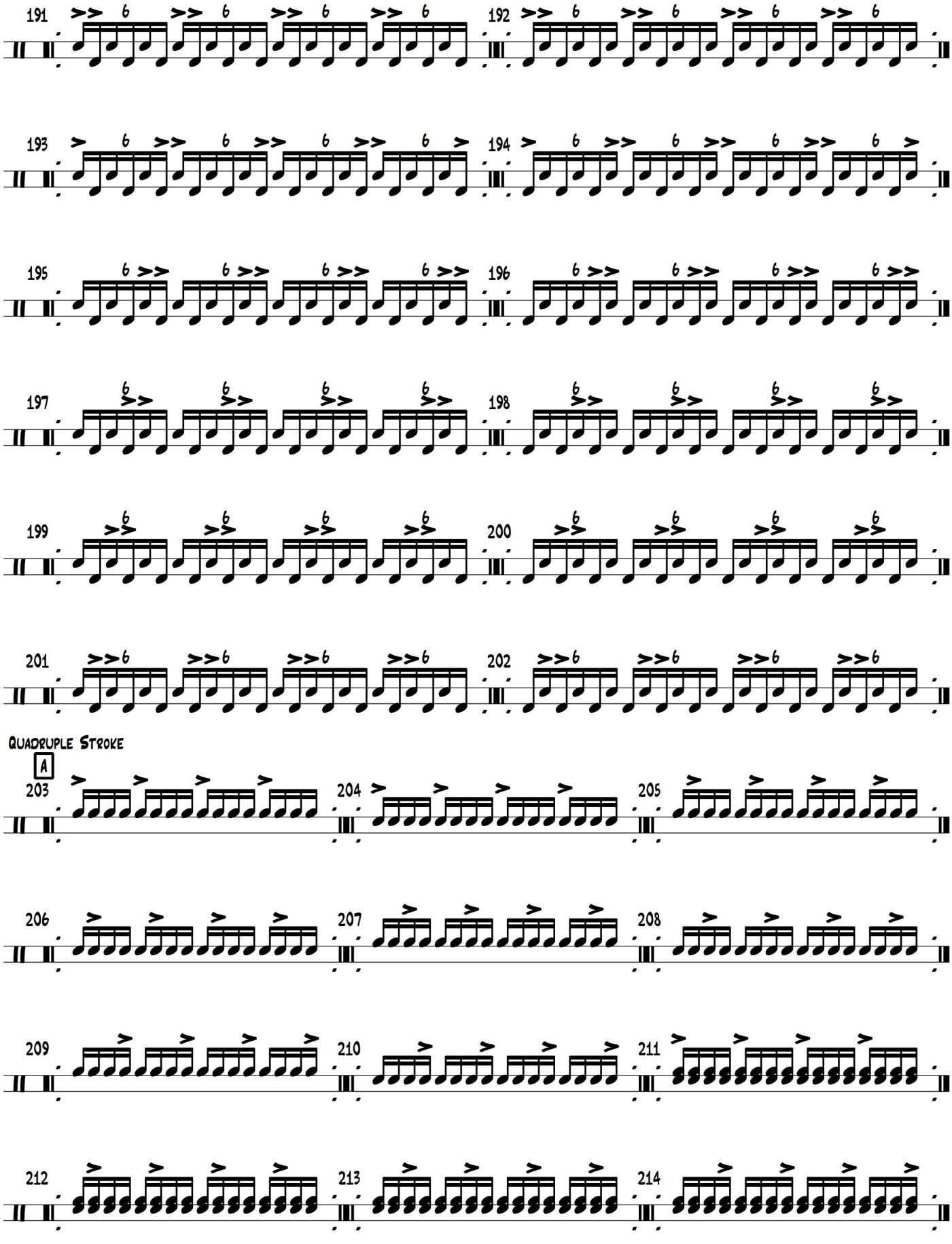
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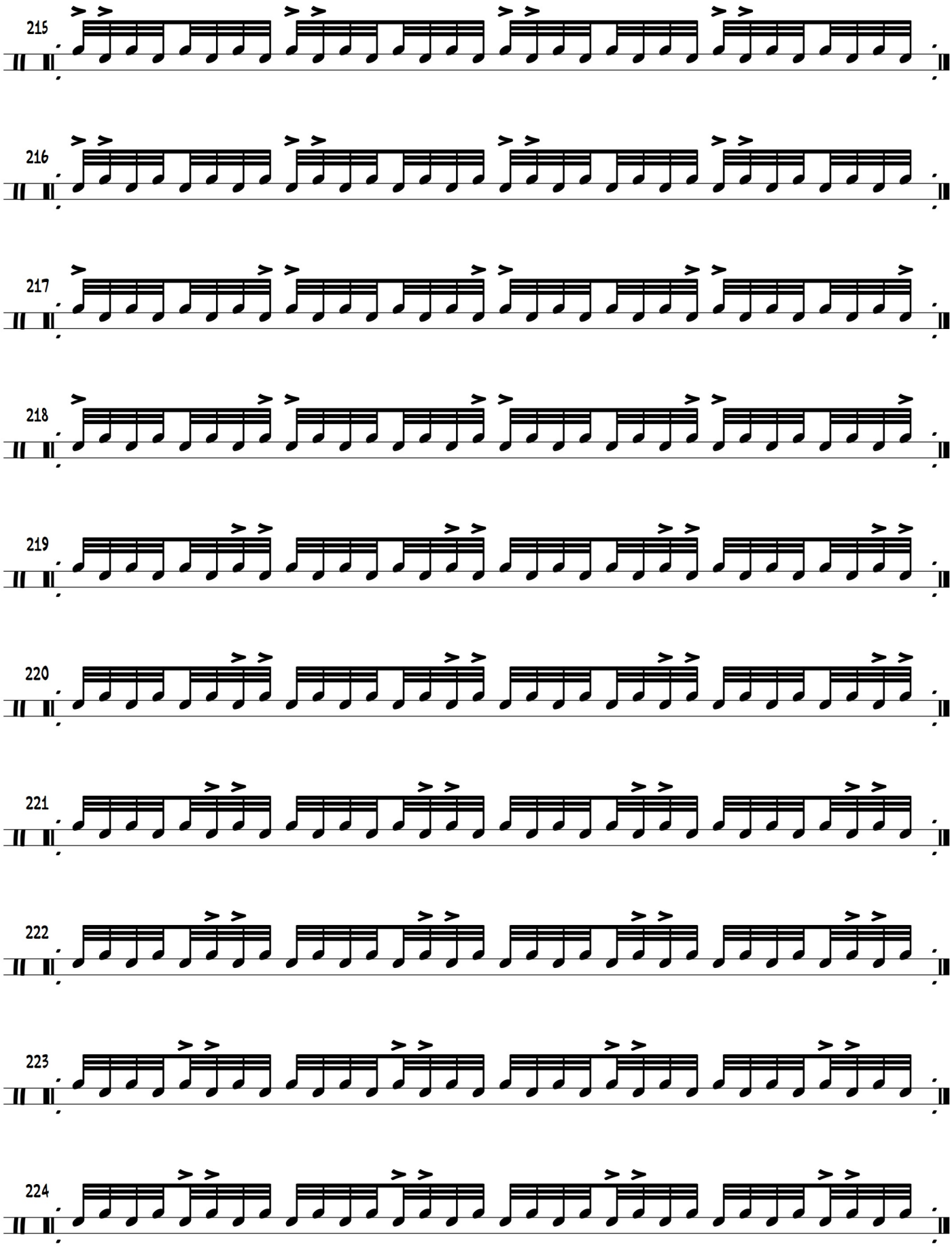
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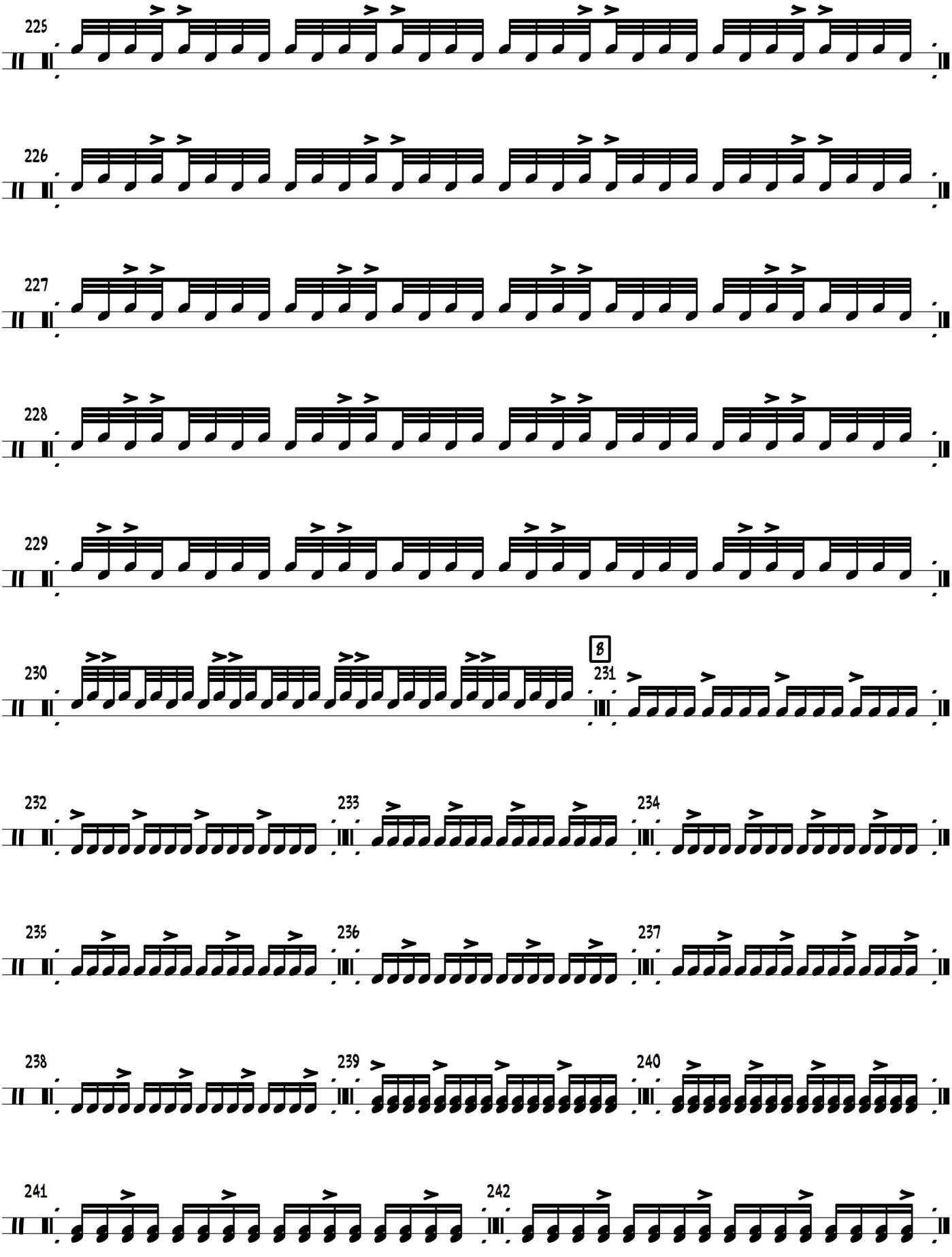
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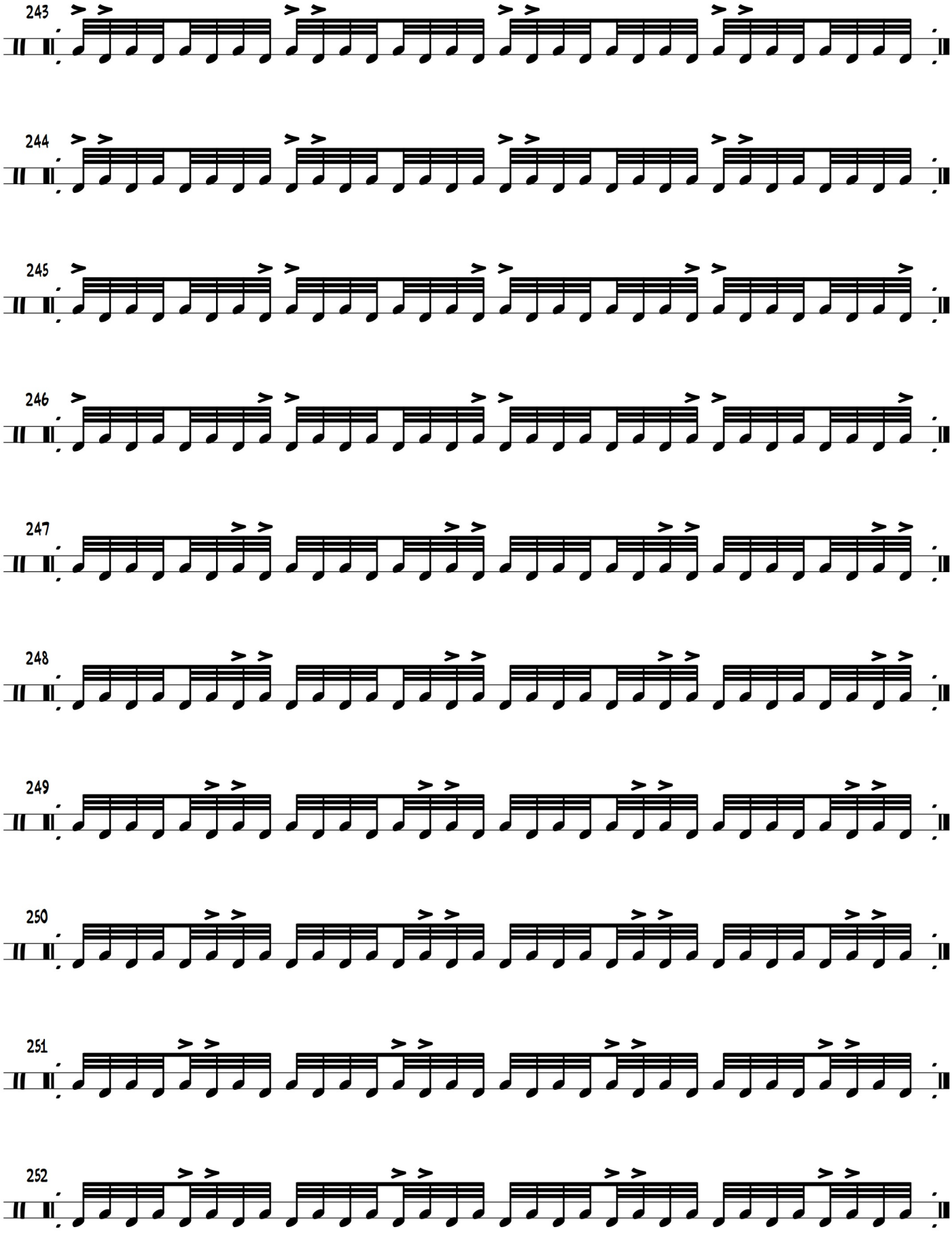
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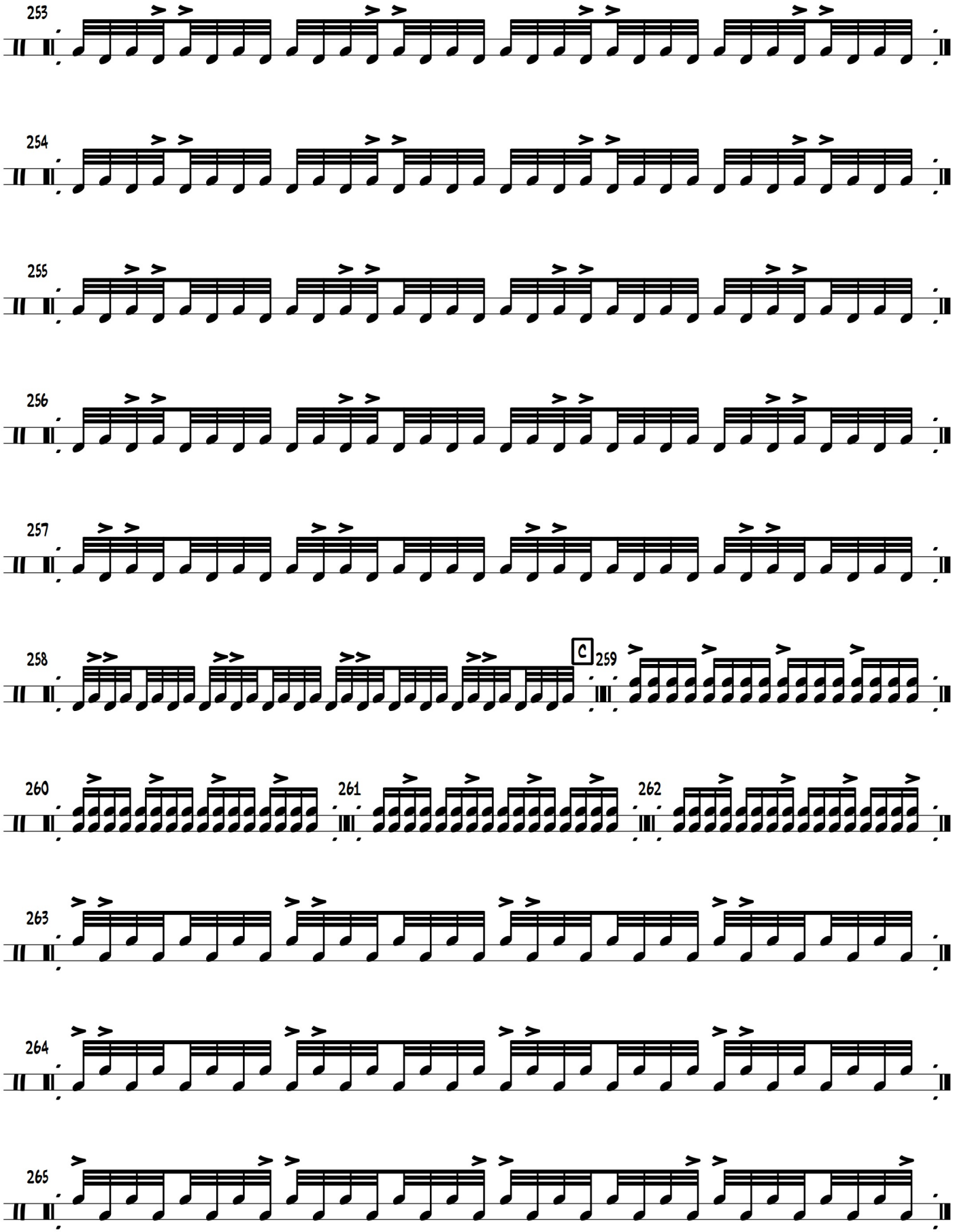
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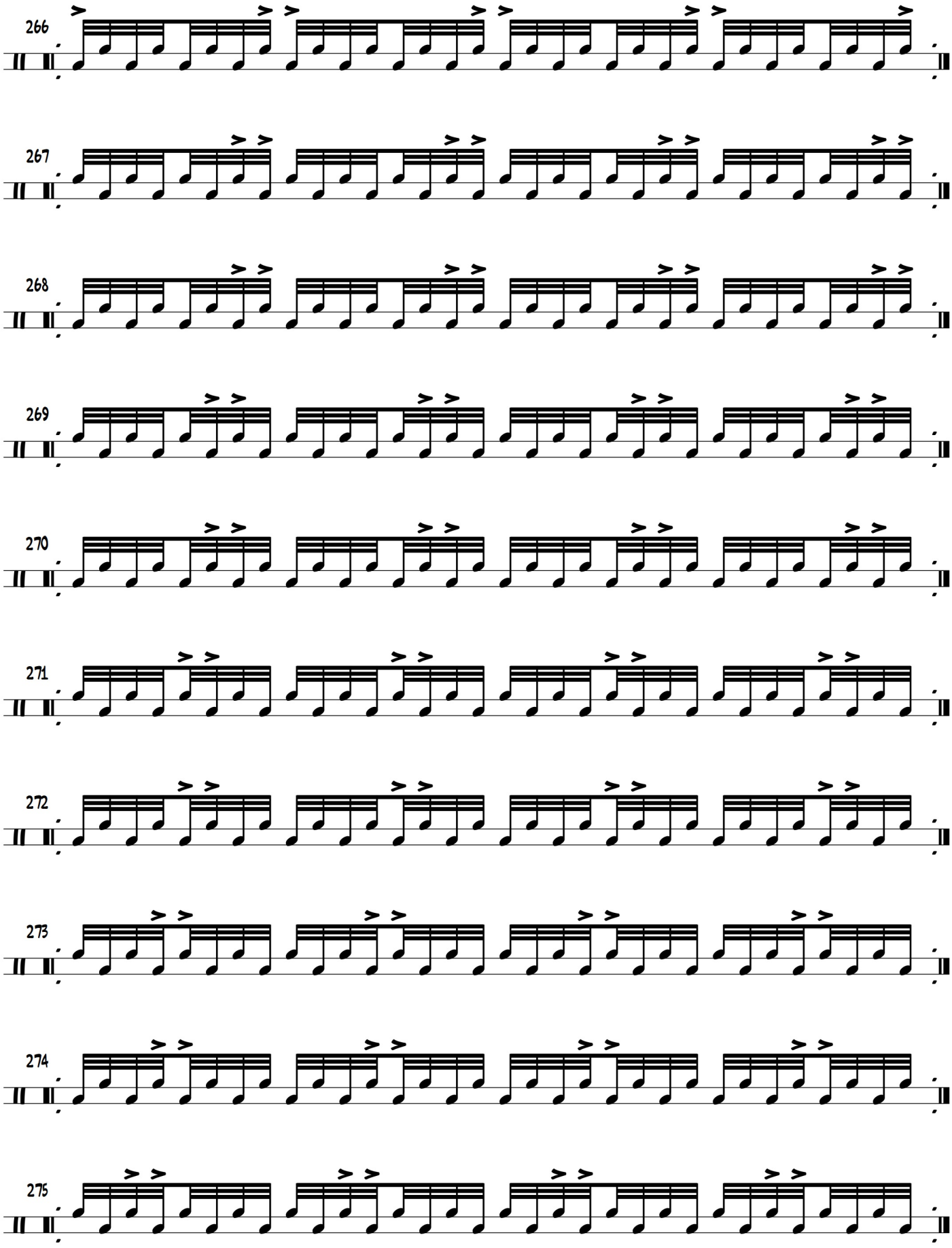
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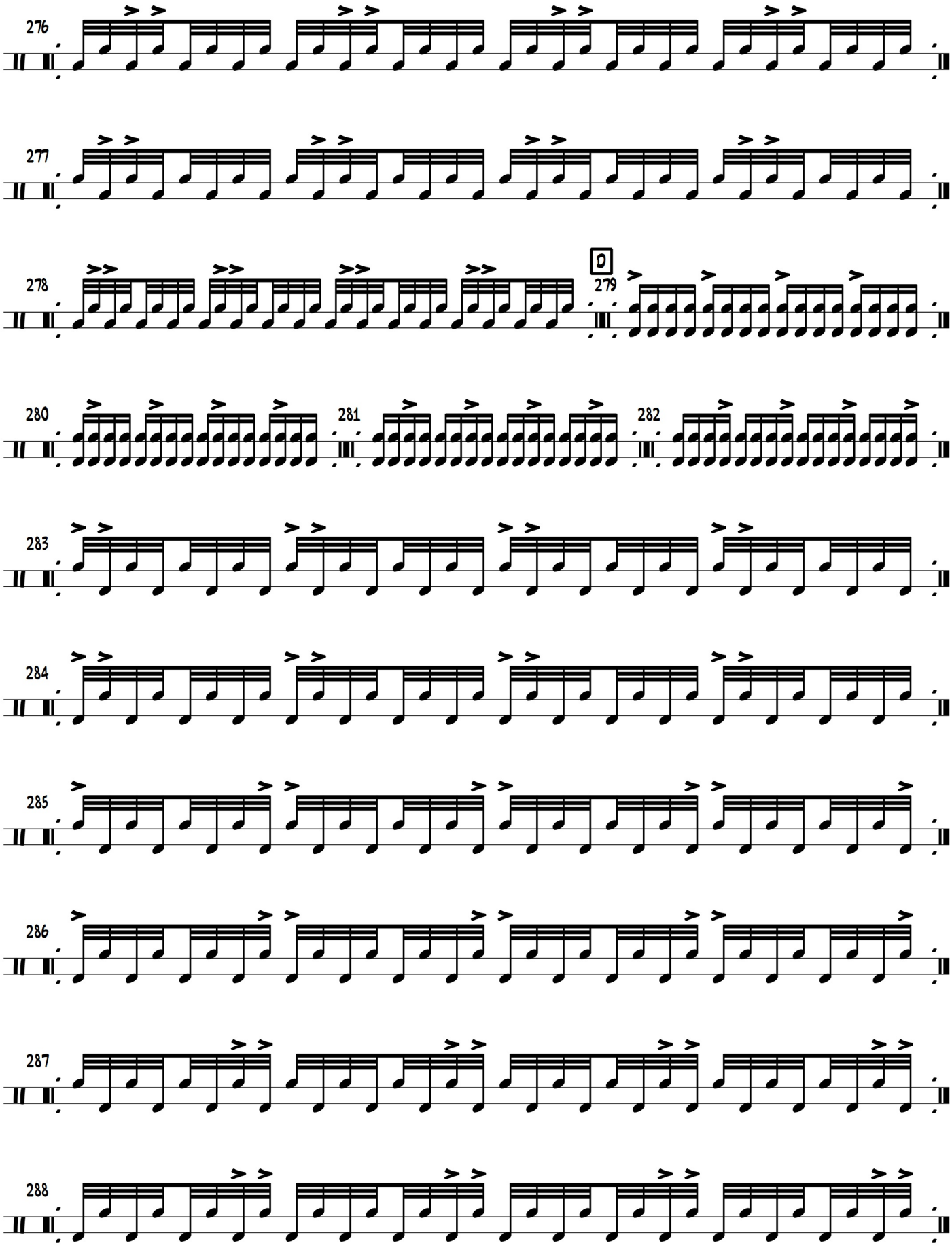
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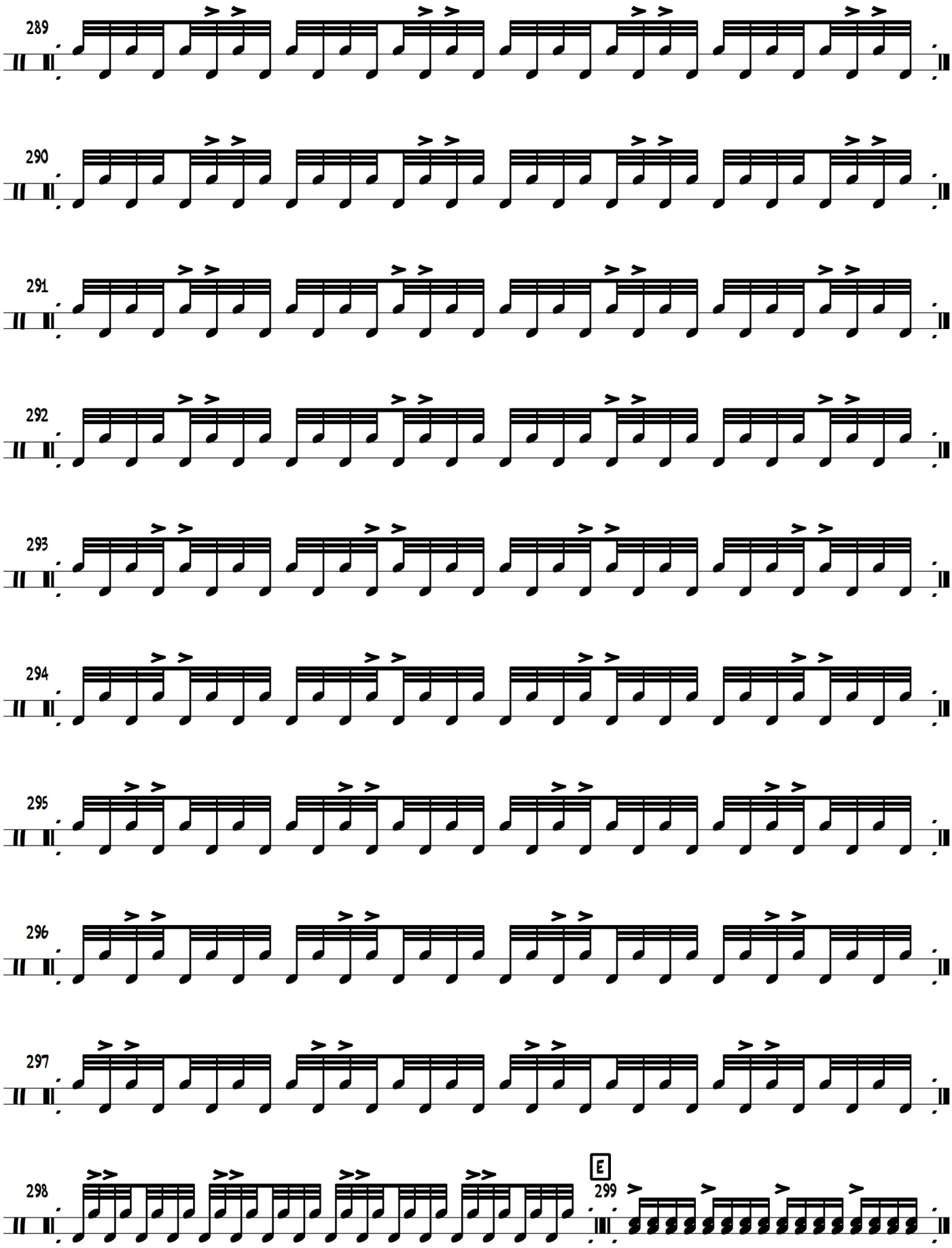
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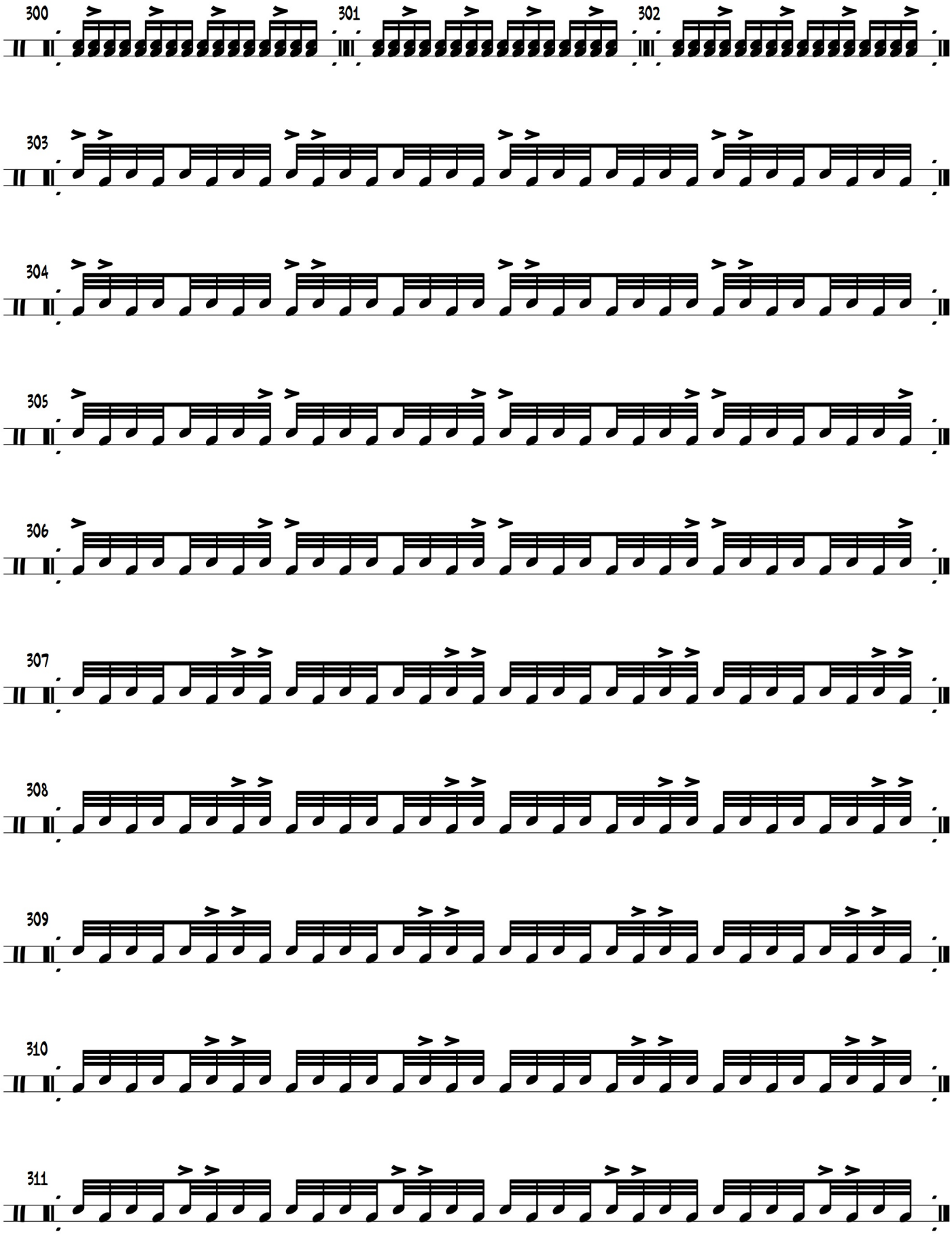
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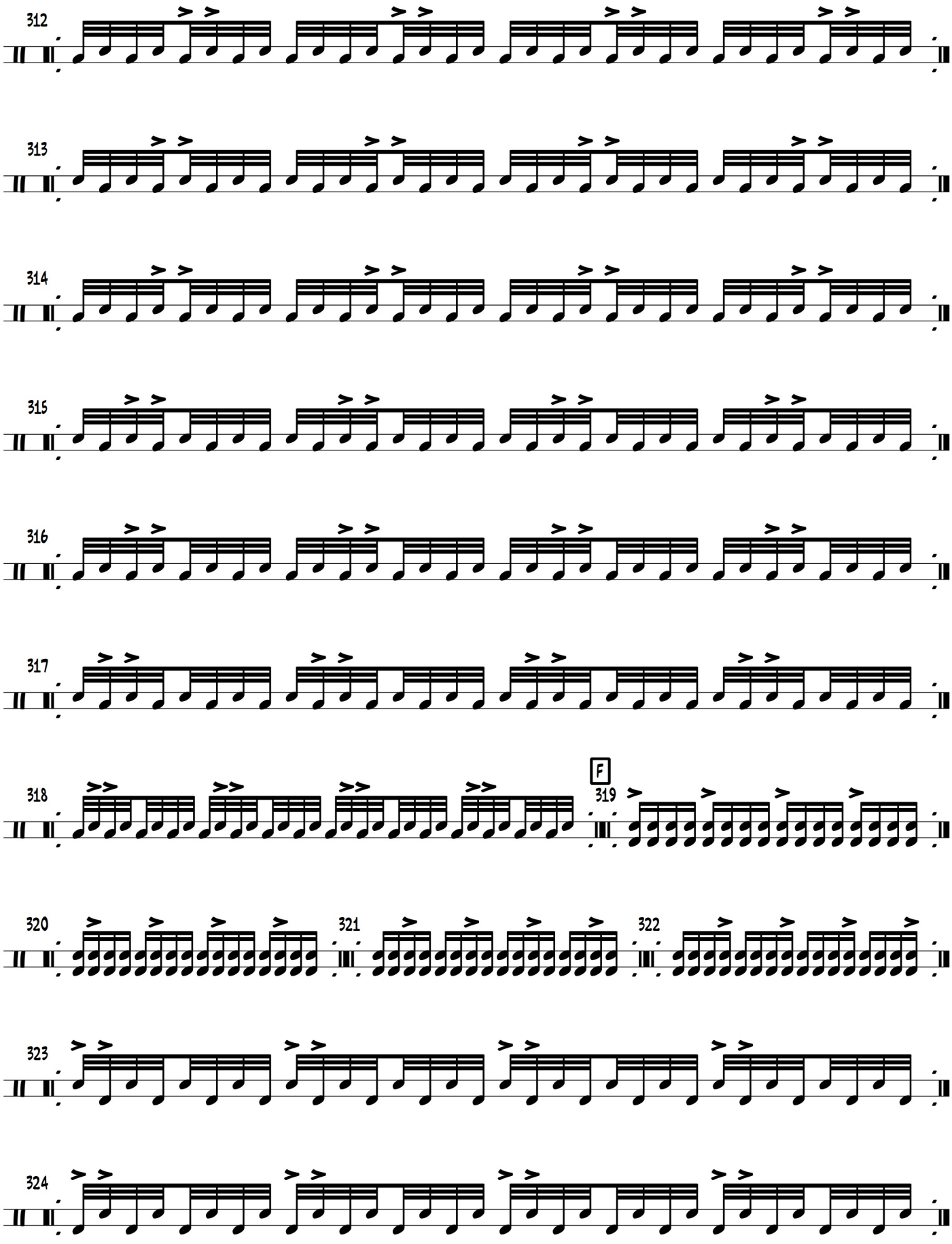
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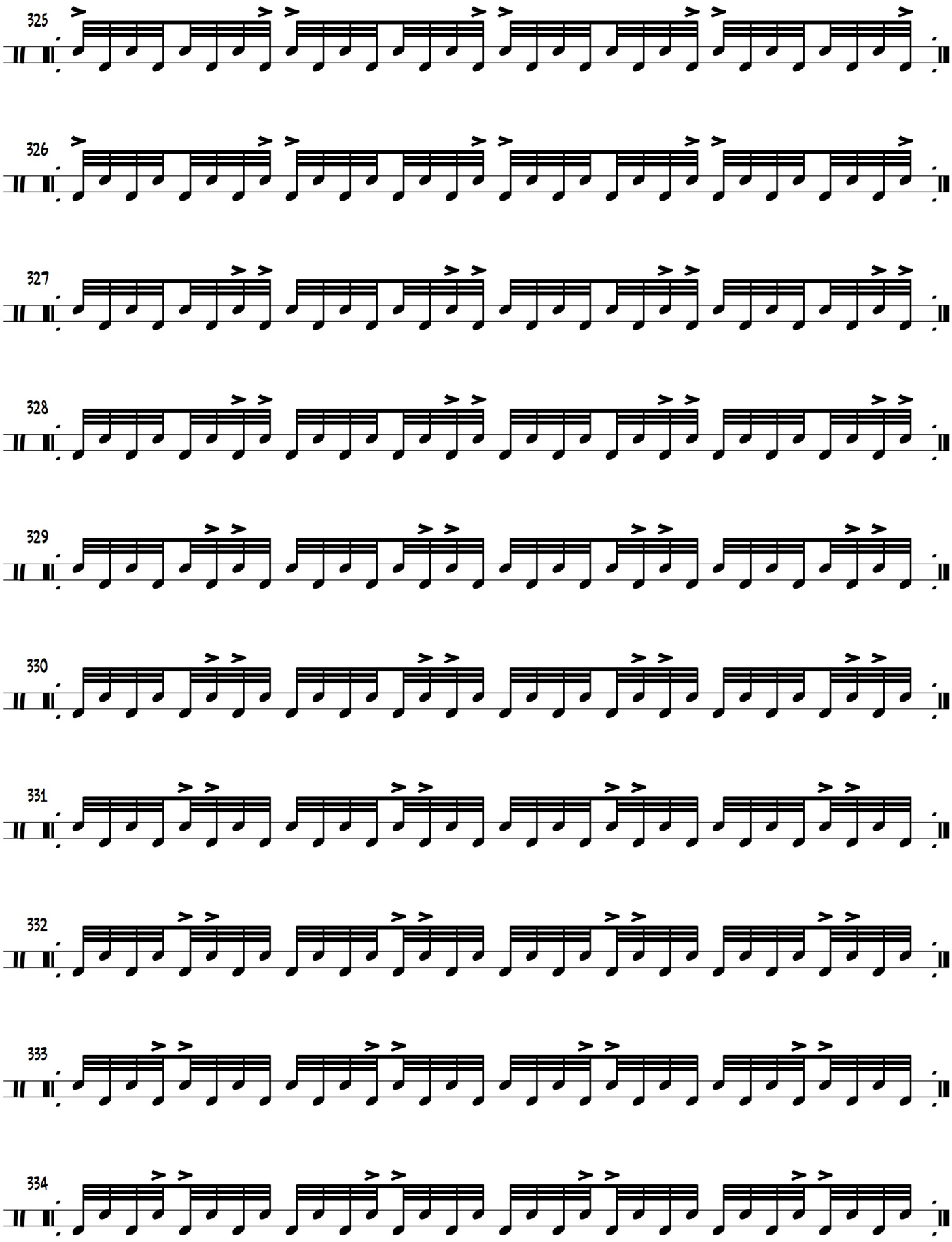
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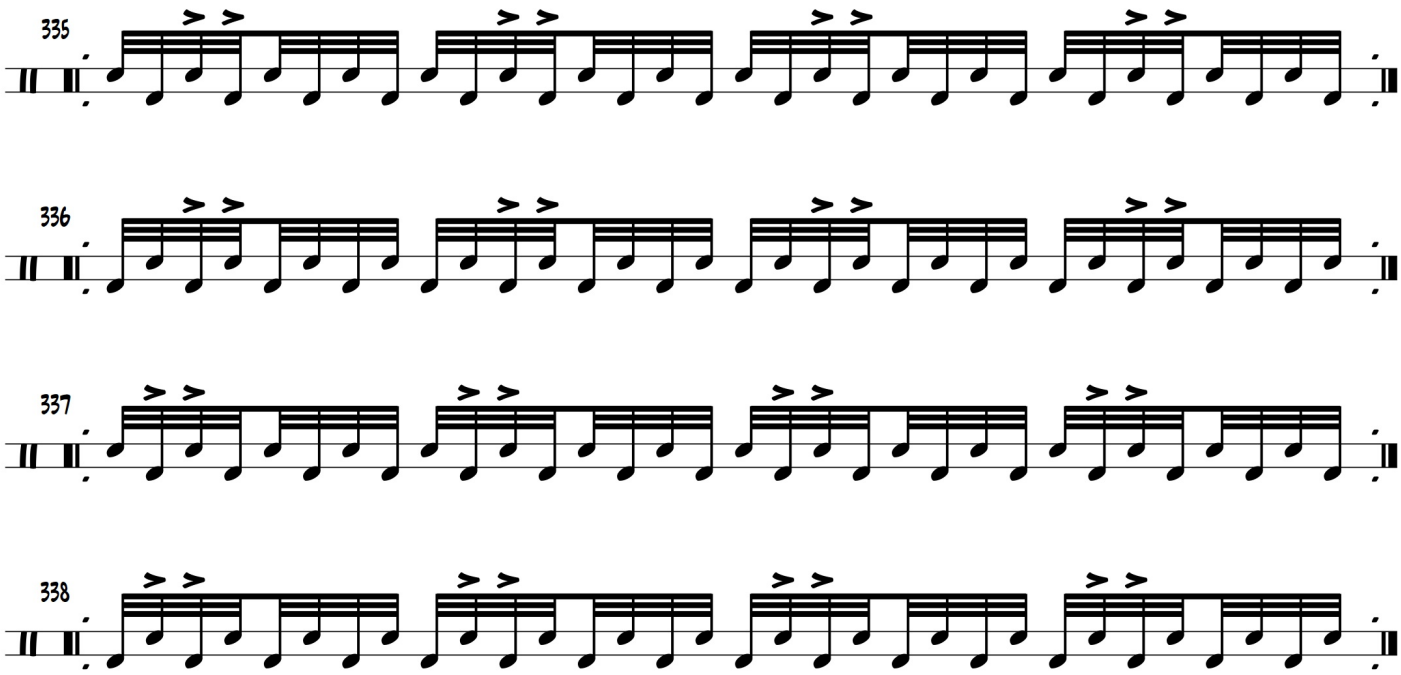
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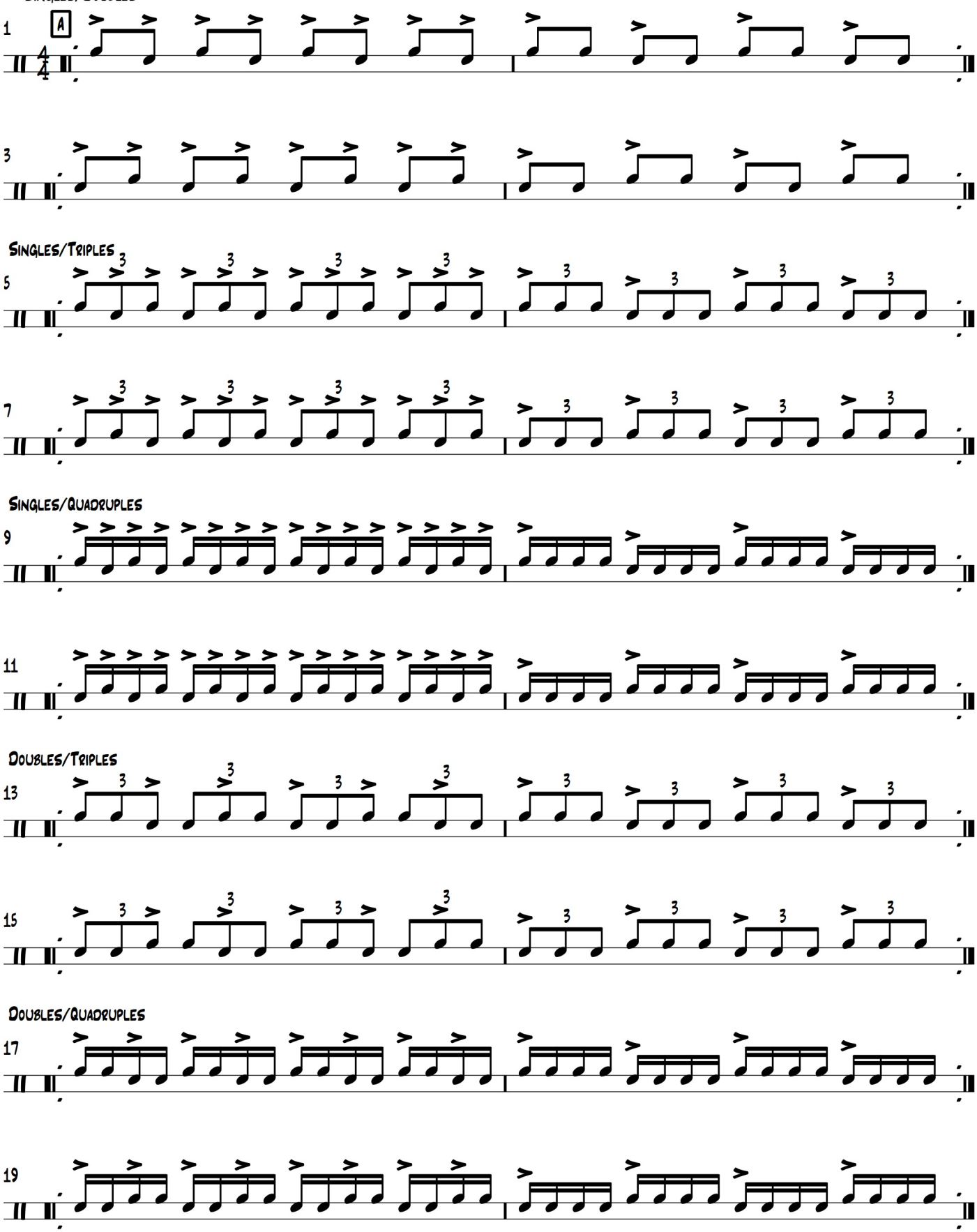
Chapter 2 - The Combinations

Singles/Doubles



Triples/Quadruples

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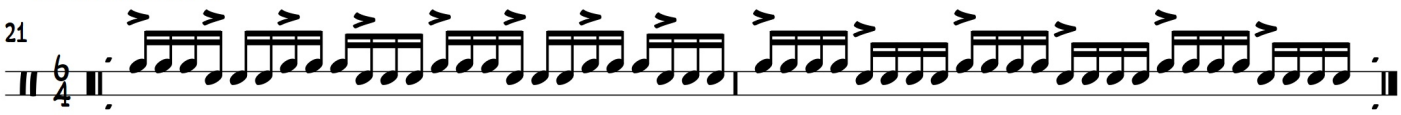

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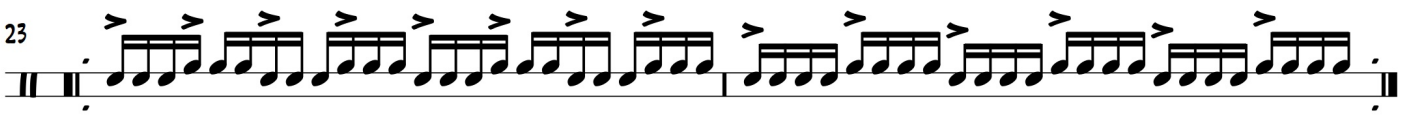

All Strokes

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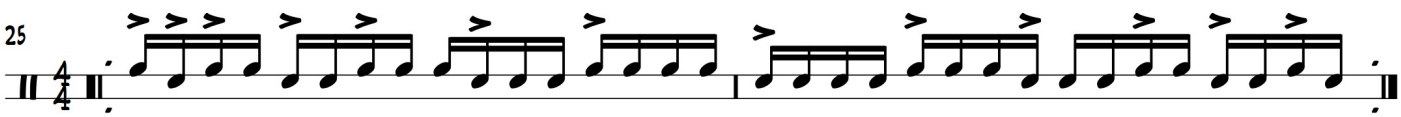

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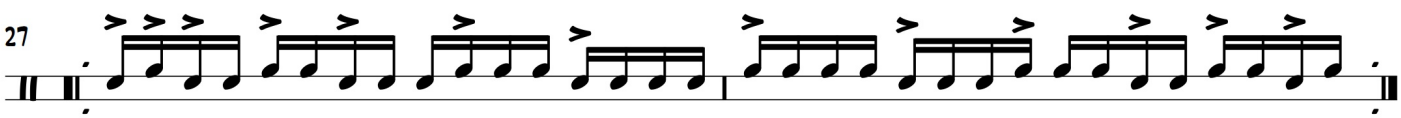

Singles/Doubles

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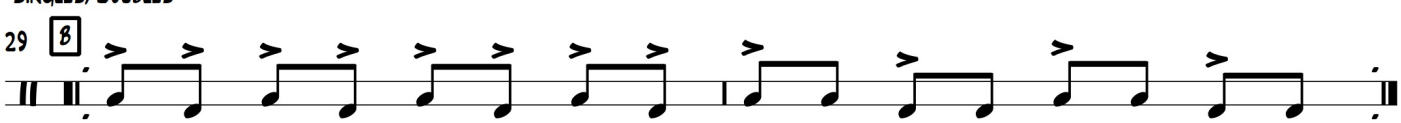

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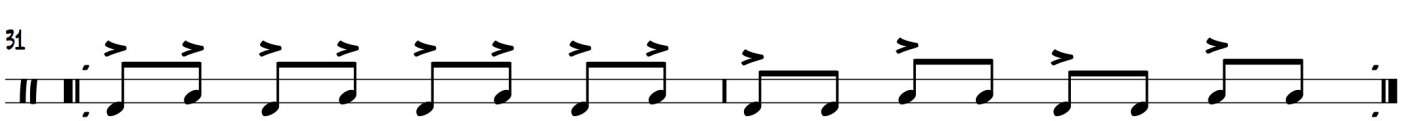

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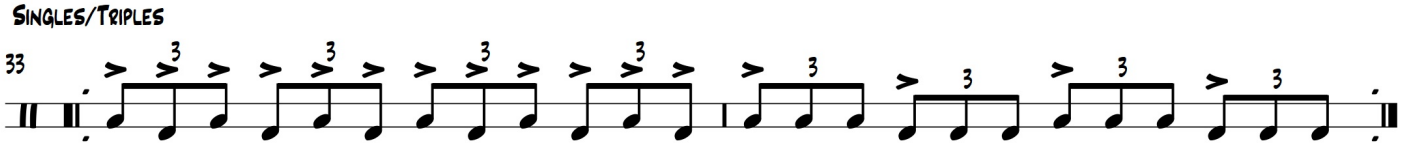

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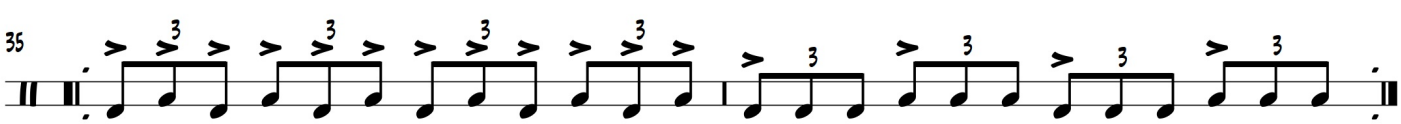

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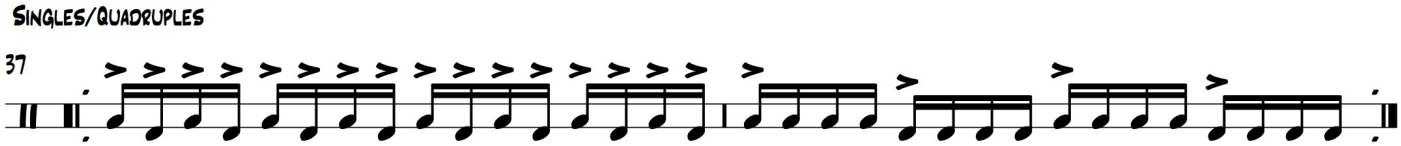

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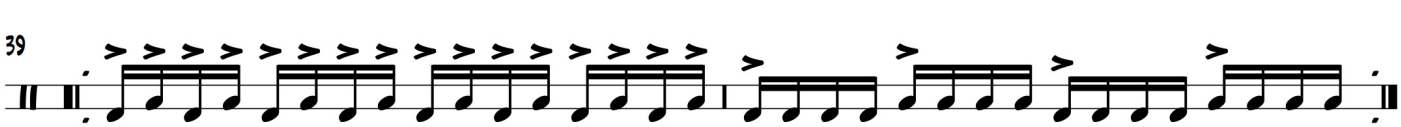

Doubles/Triples

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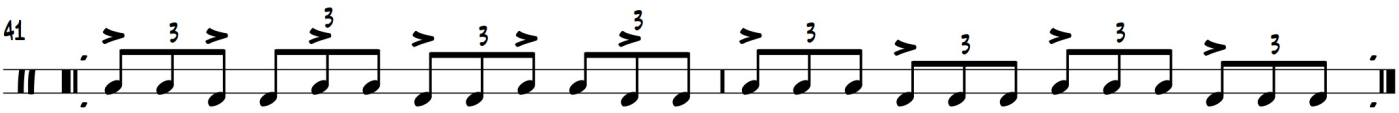

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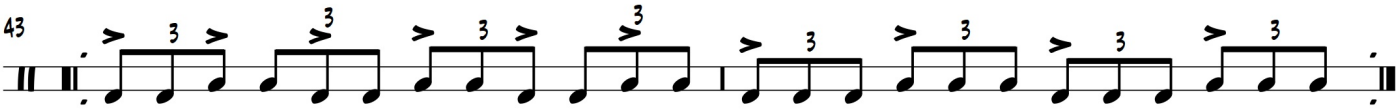

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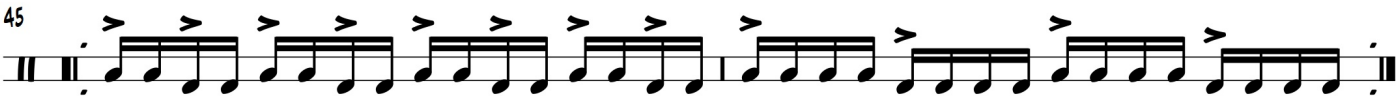

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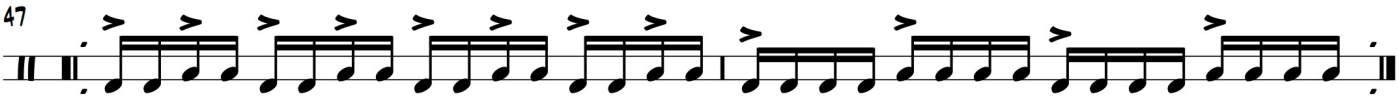
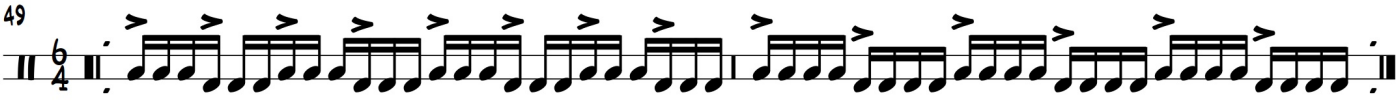


Triples/Quadruples

49



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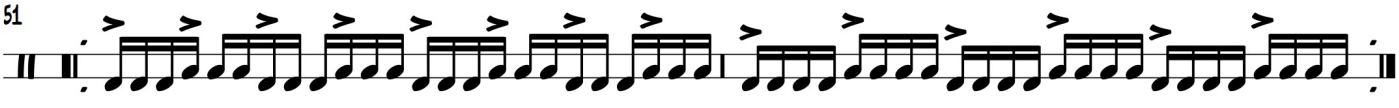
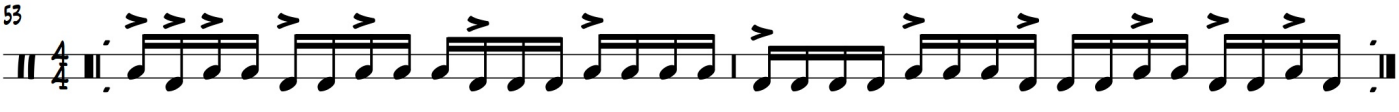


All Strokes

53



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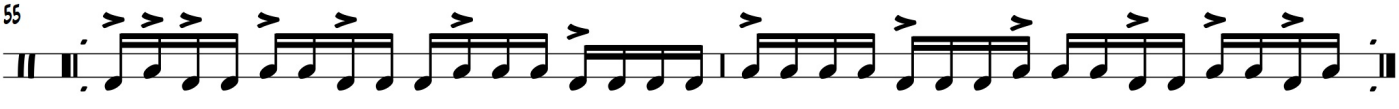
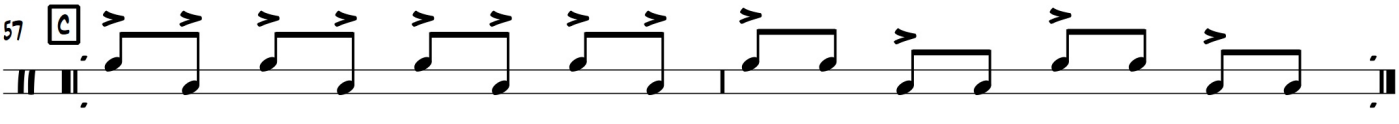


Singles/Doubles

57



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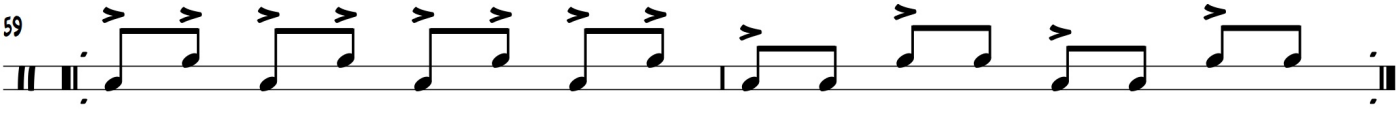

Singles/Triples

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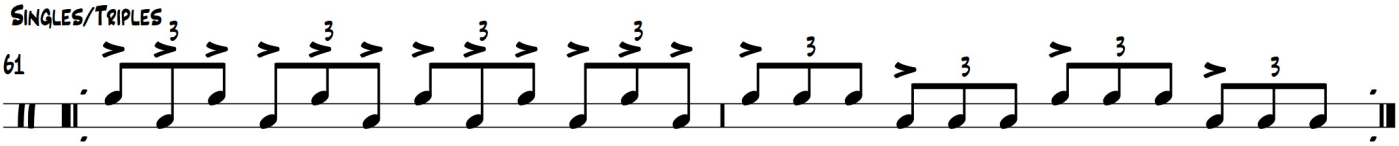

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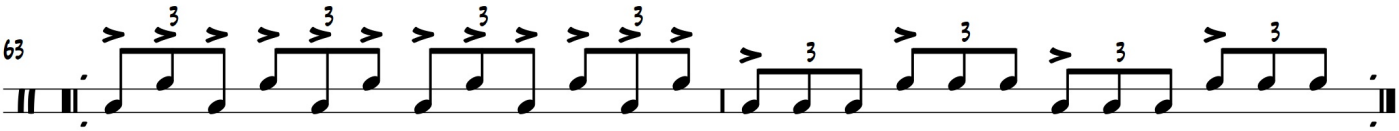

Singles/Quadruples

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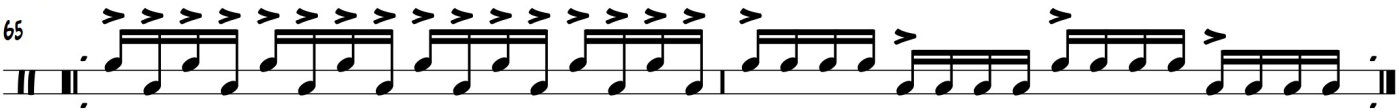

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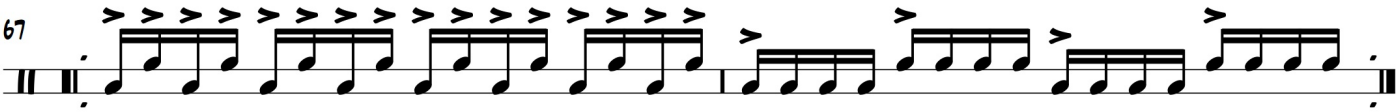

Doubles/Triples

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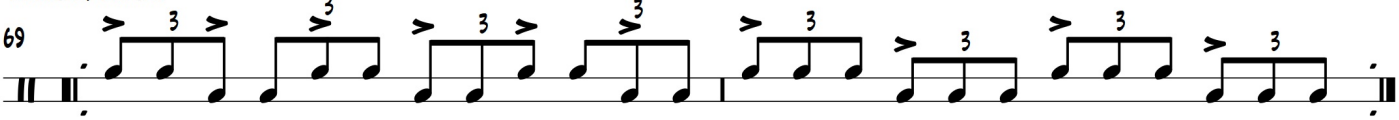

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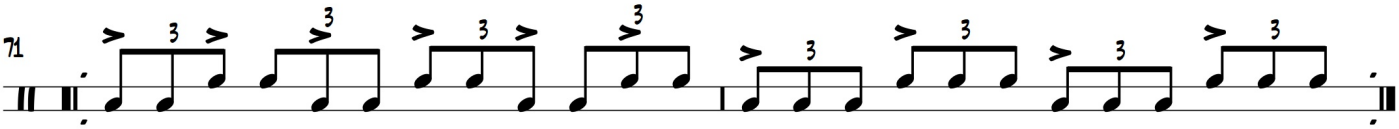
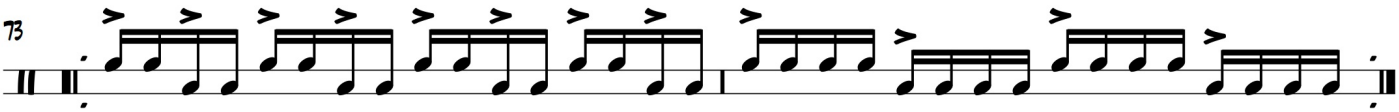


Doubles/Quadruples

73



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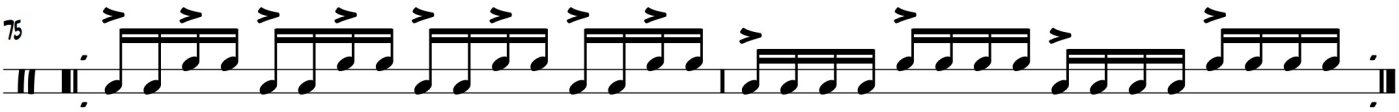

Triples/Quadruples

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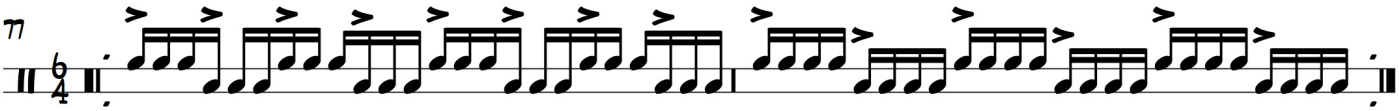

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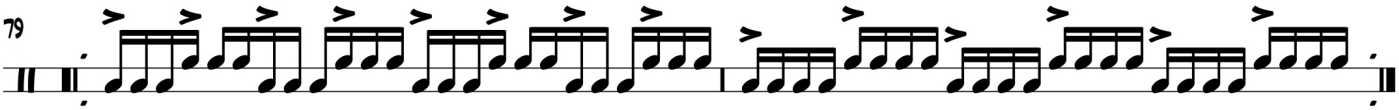
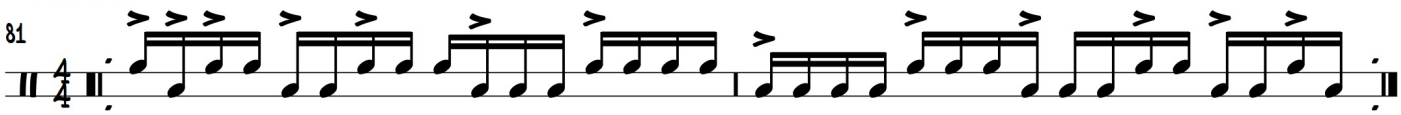
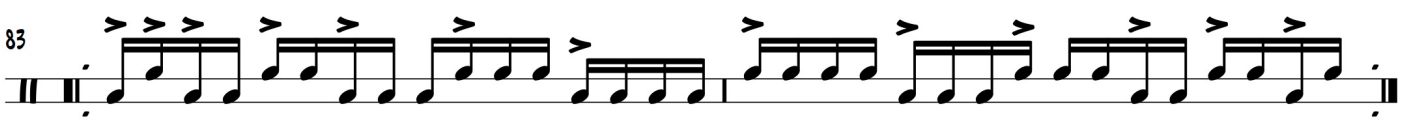
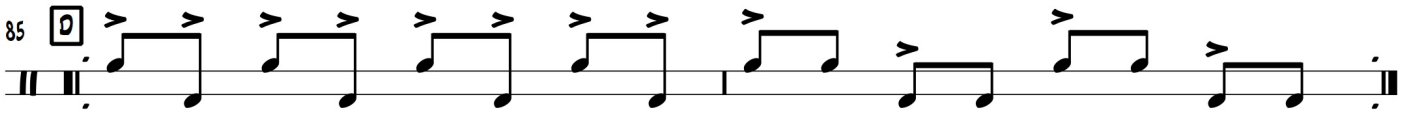


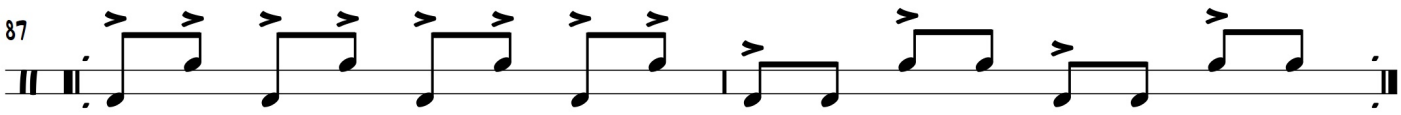
All Strokes



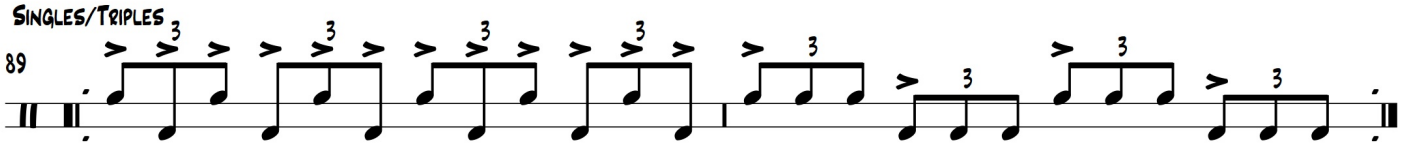


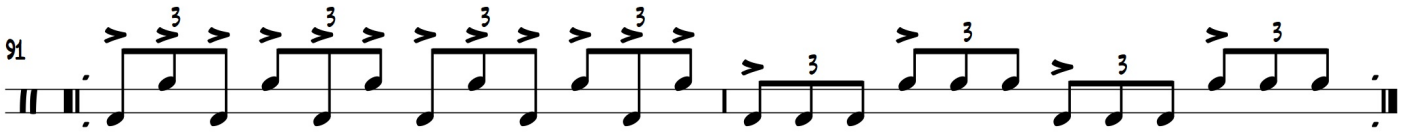
Singles/Doubles



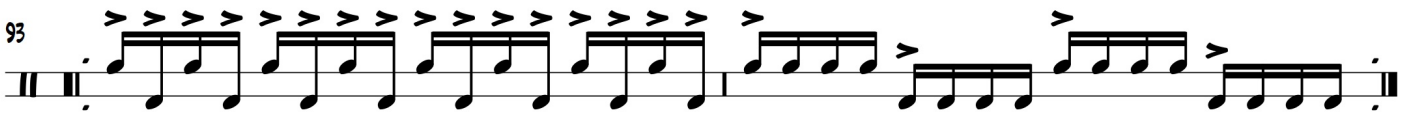


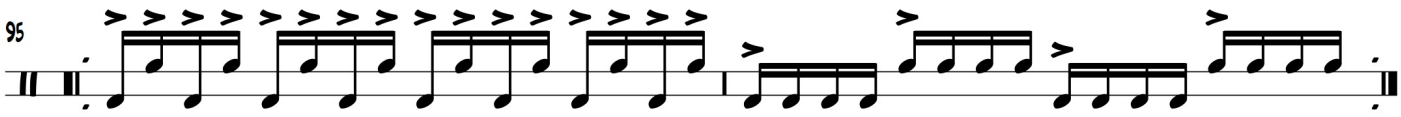
Singles/Triples



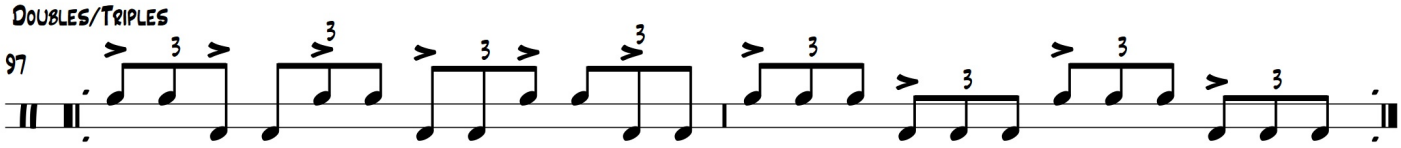


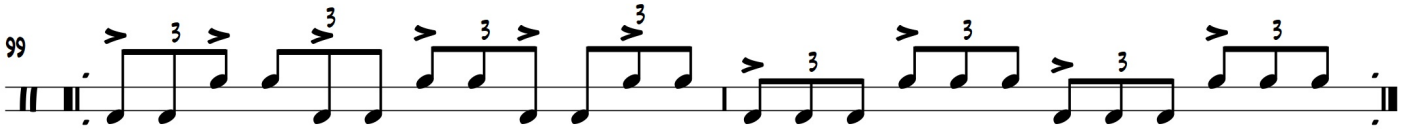
Singles/Quadruples





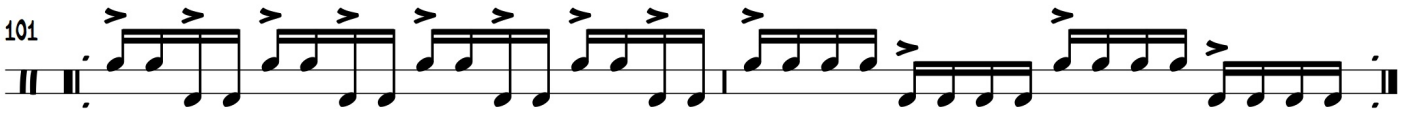
Doubles/Triples





Doubles/Quadruples

101



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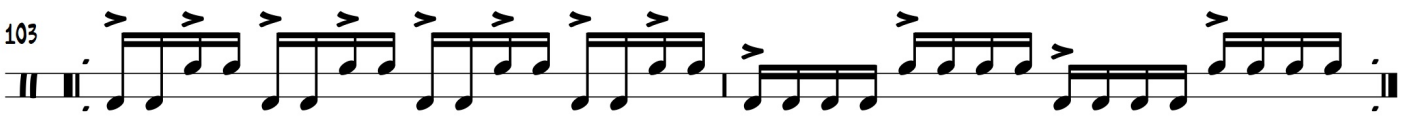
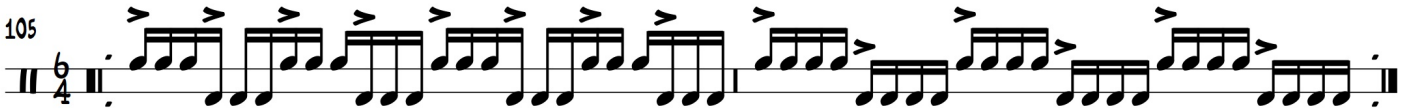


Triples/Quadruples

105



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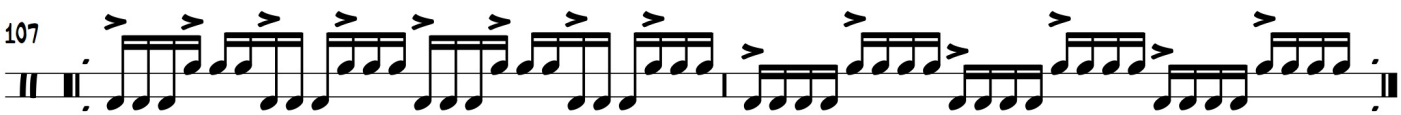
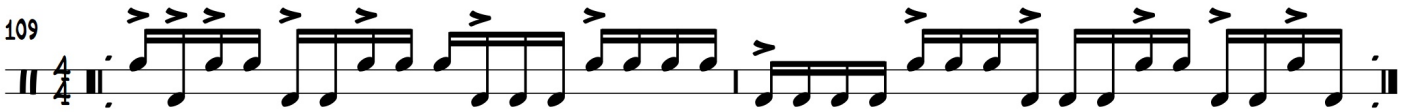


All Strokes

109



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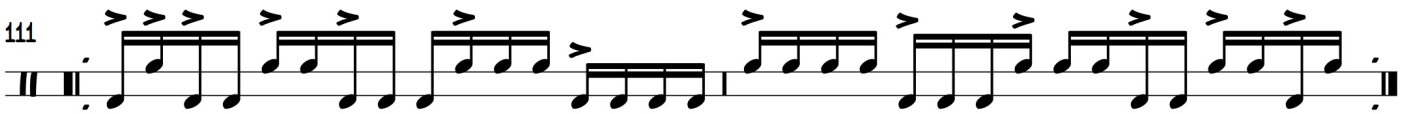
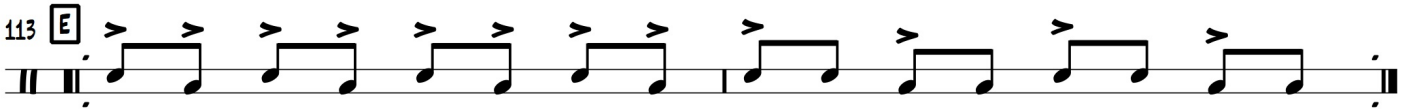


Singles/Doubles

113 E



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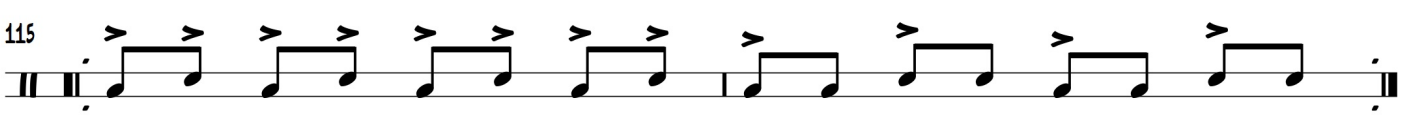
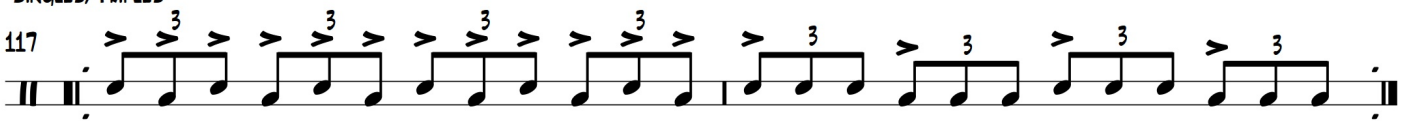


Singles/Triples

117



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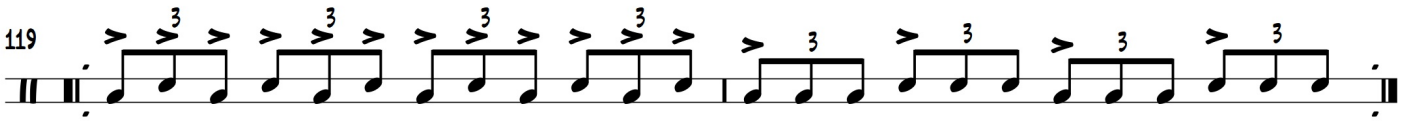
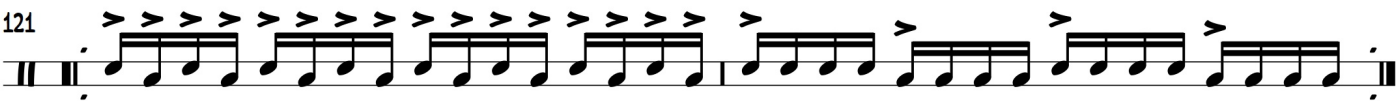


Singles/Quadruples

121



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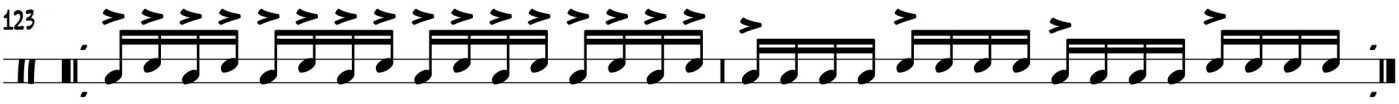
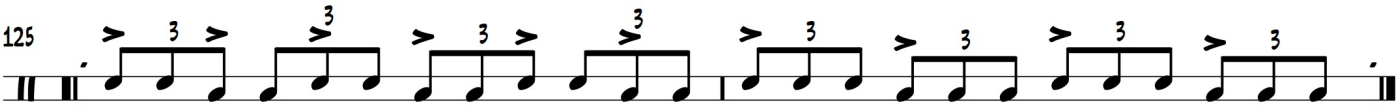


Doubles/Triples

125



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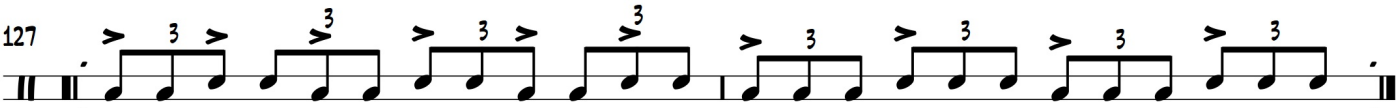
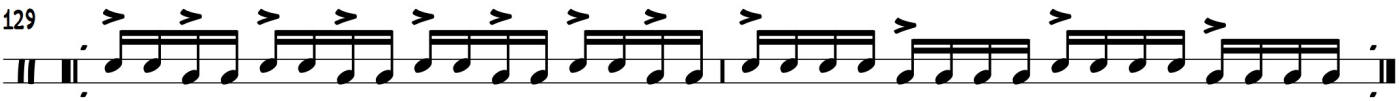


Doubles/Quadruples

129



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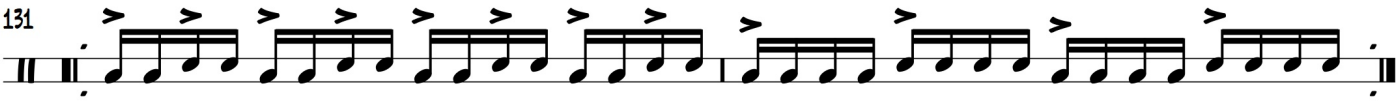
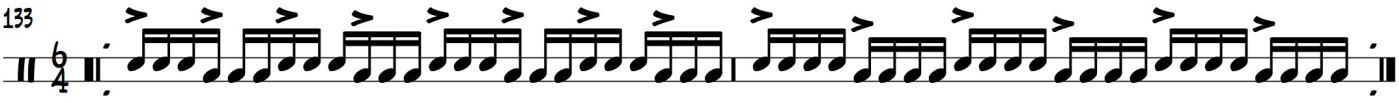


Triples/Quadruples

133



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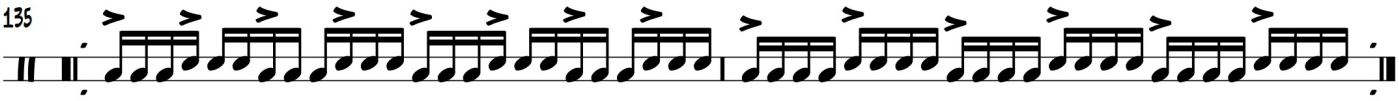
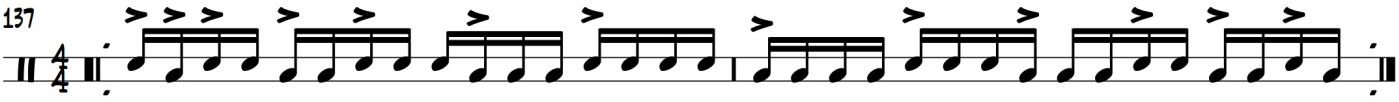


All Strokes

137



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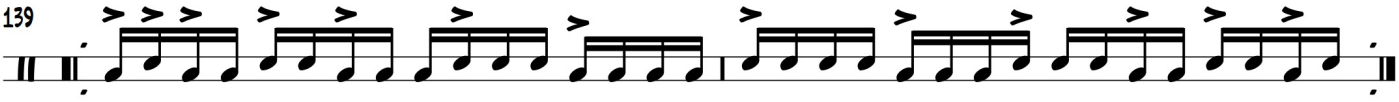
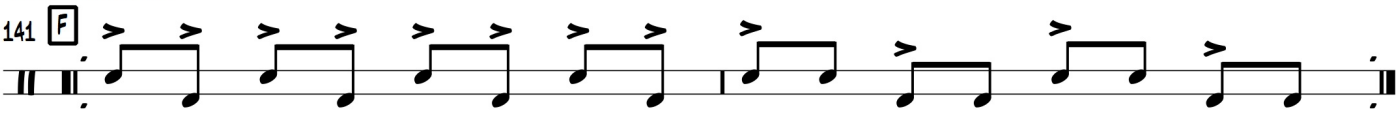


Singles/Doubles

141 F



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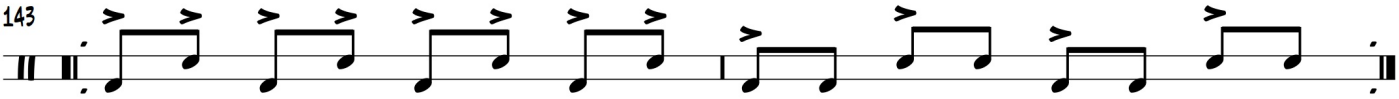
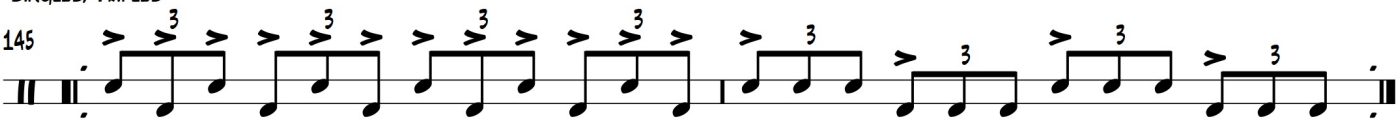


Singles/Triples

145



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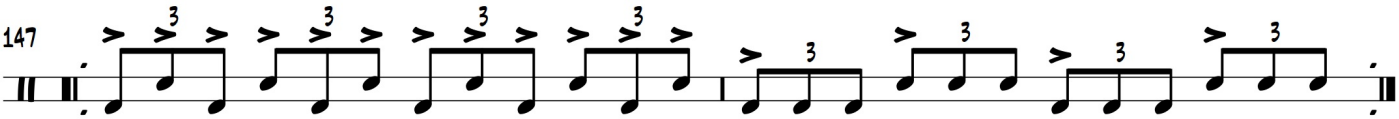
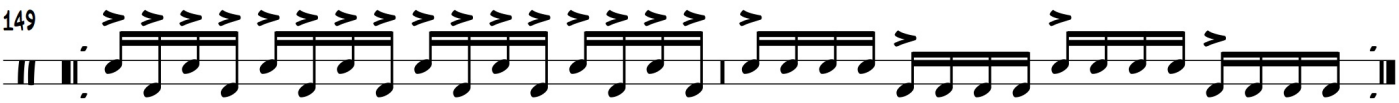


Singles/Quadruples

149



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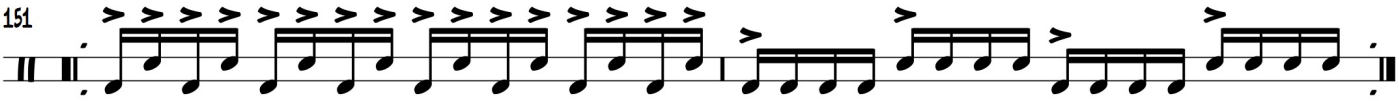
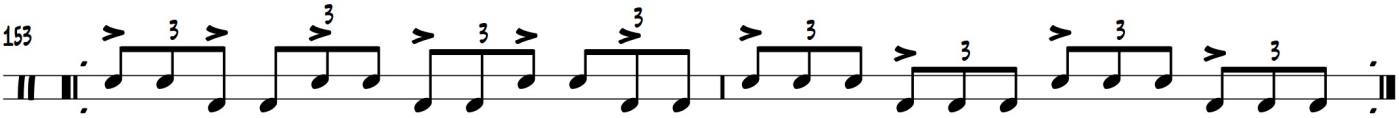


Doubles/Triples

153



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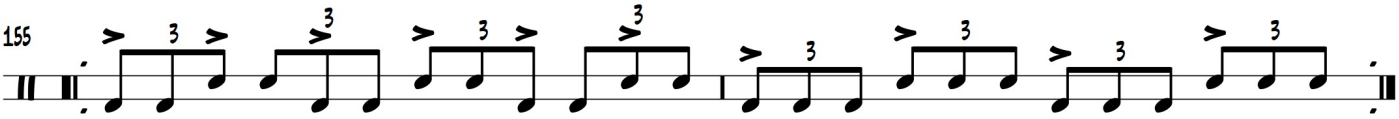

Doubles/Quadruples

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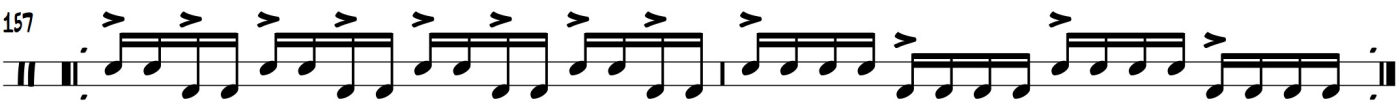

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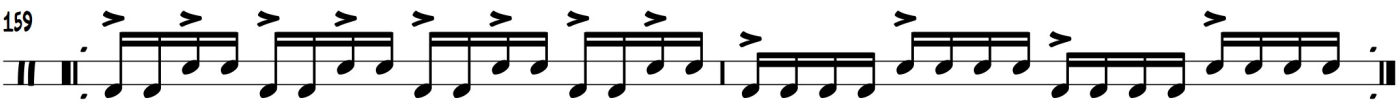

Triples/Quadruples

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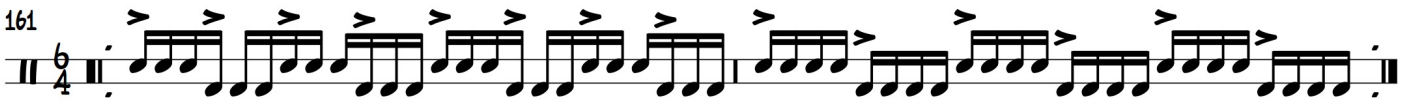

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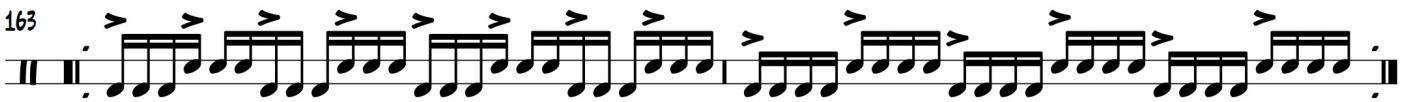

All Strokes

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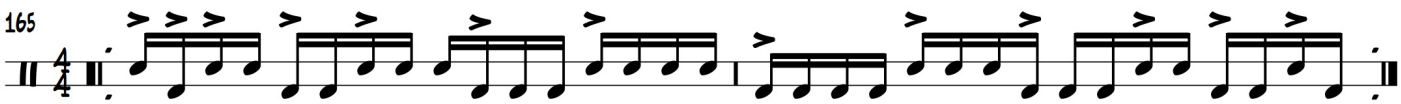

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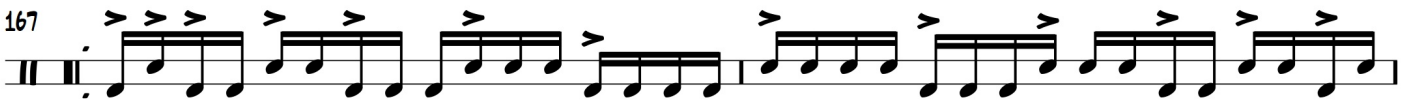
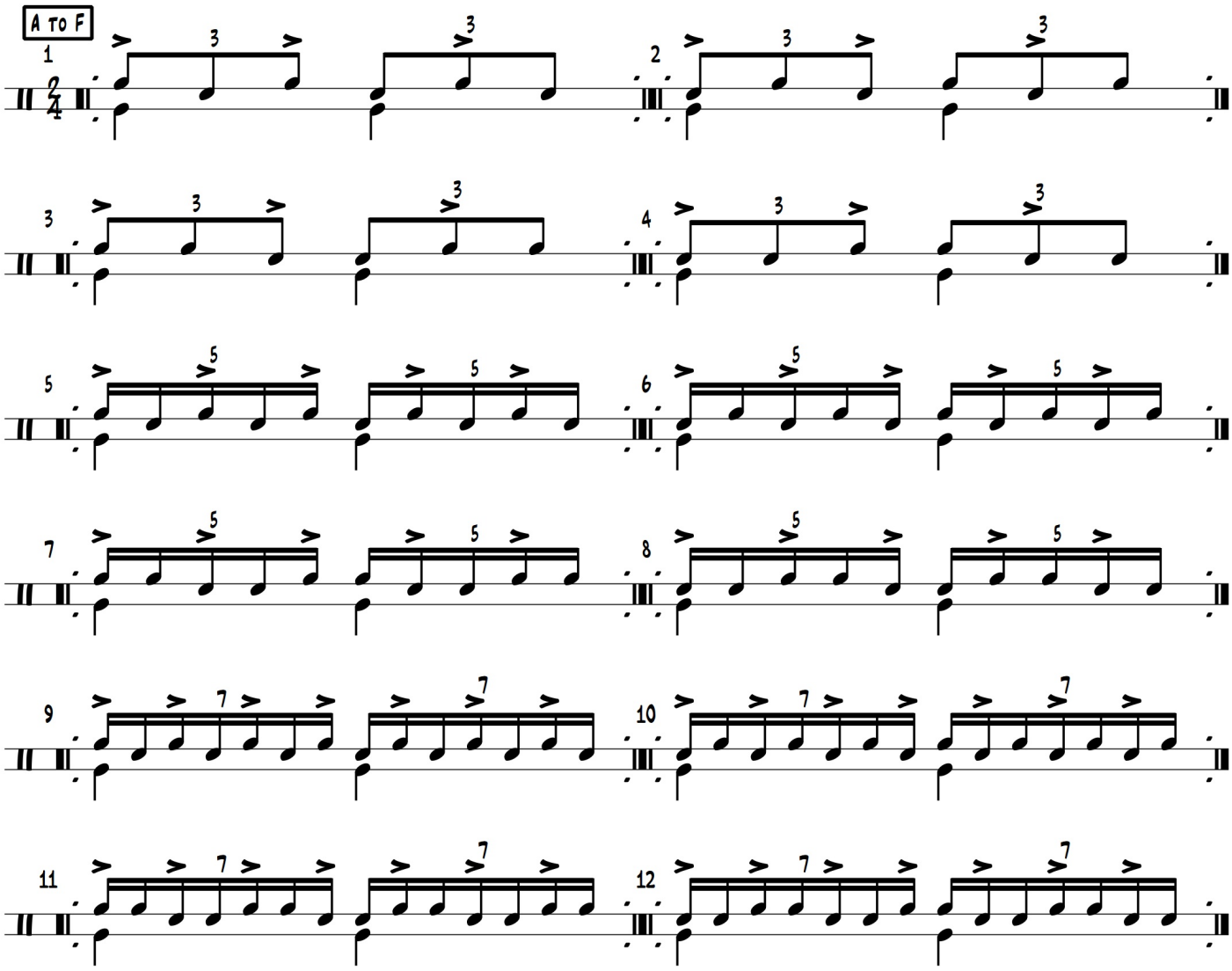
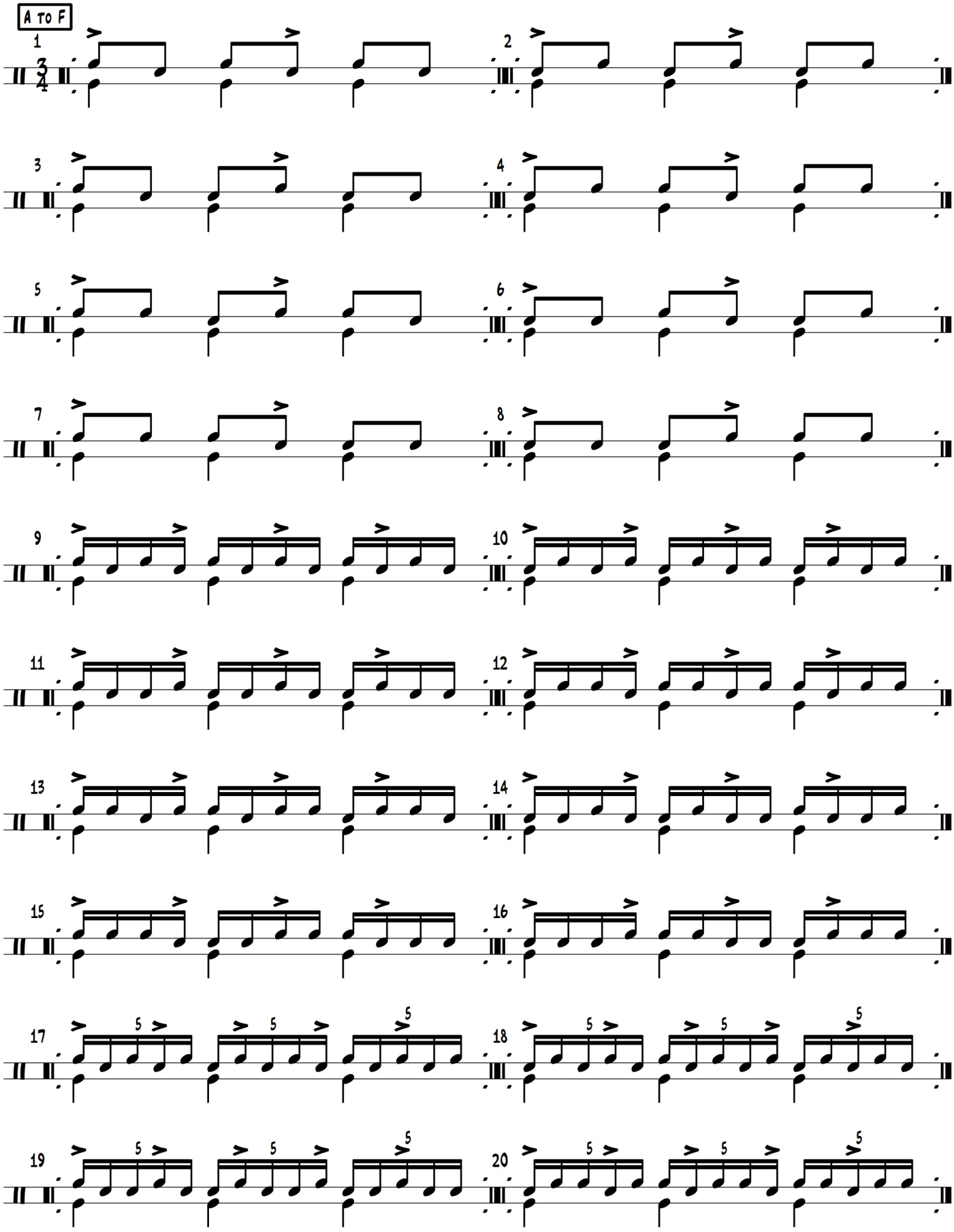
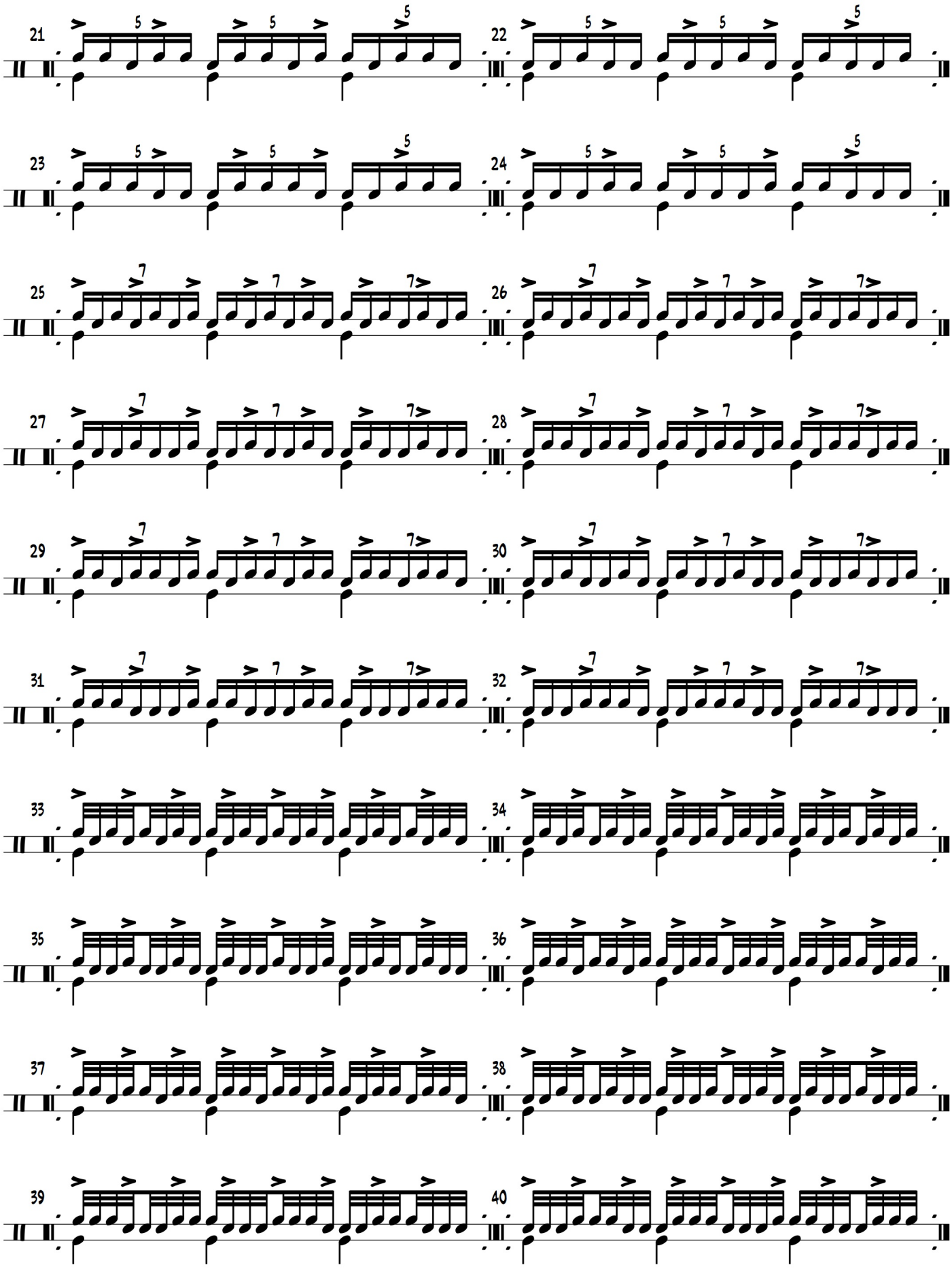


Chapter 3 - The Polyrhythms: 2-meter



Chapter 3 - The Polyrhythms: 3-meter

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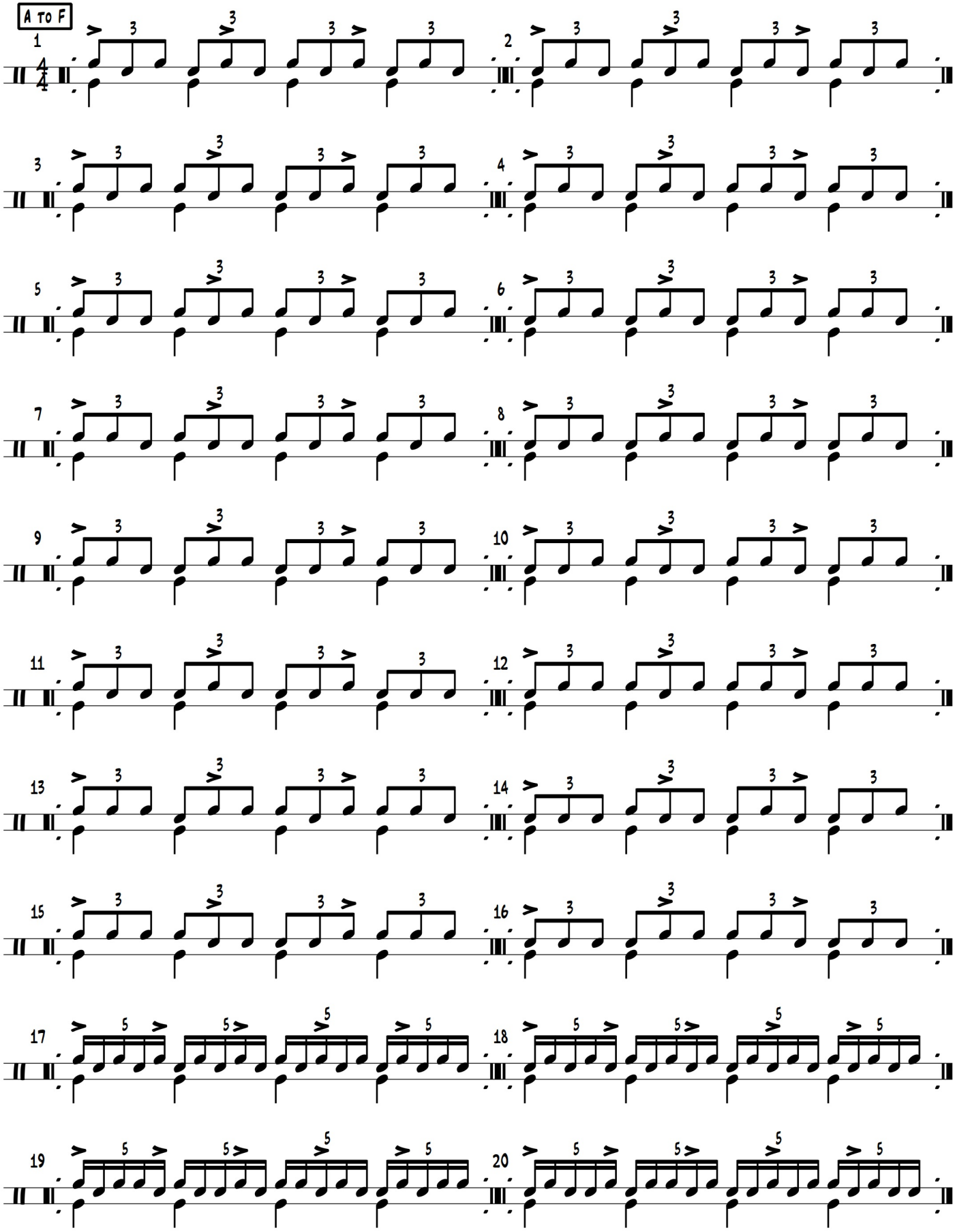
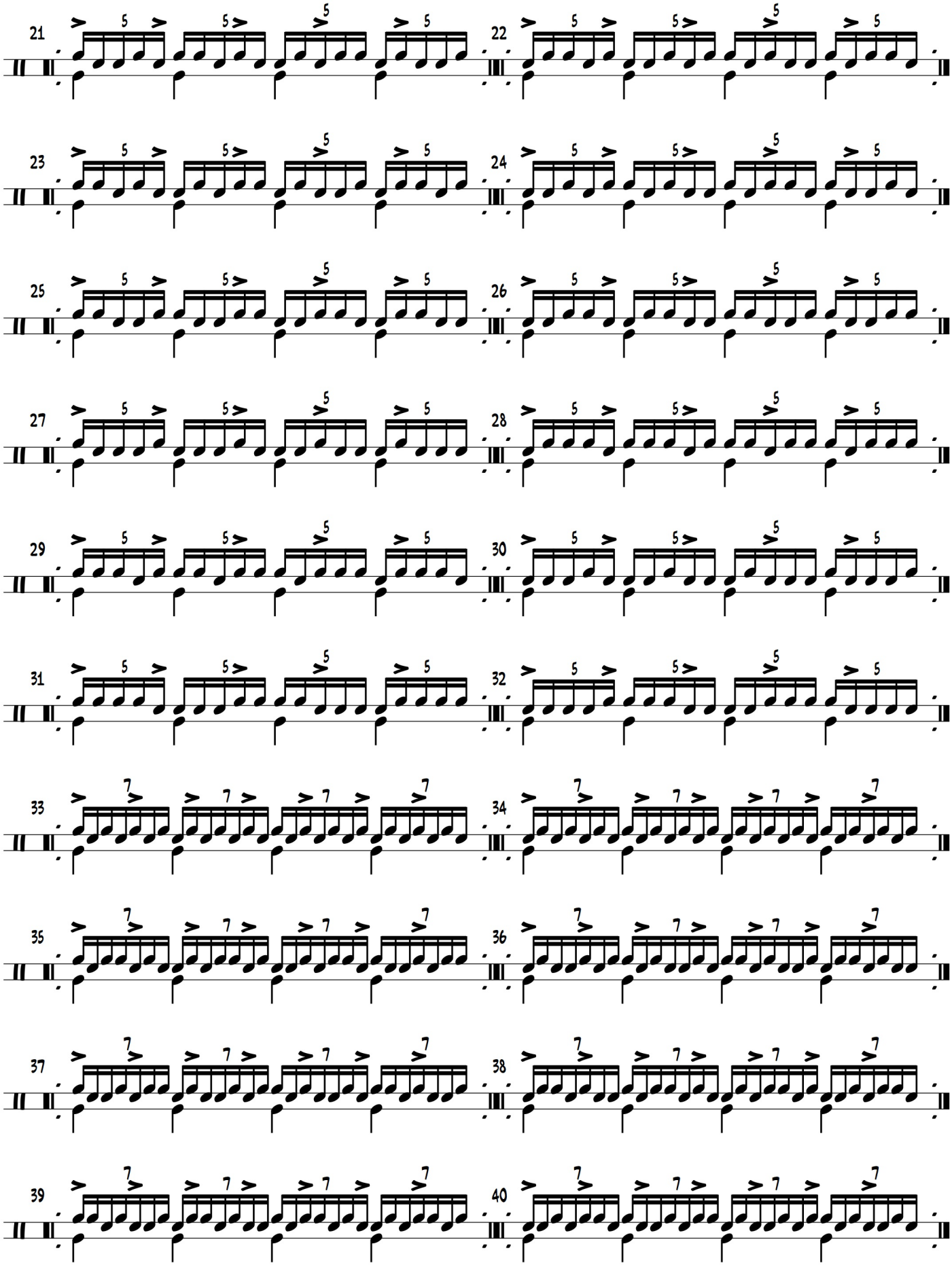
Chapter 3 - The Polyrhythms: 4-meter

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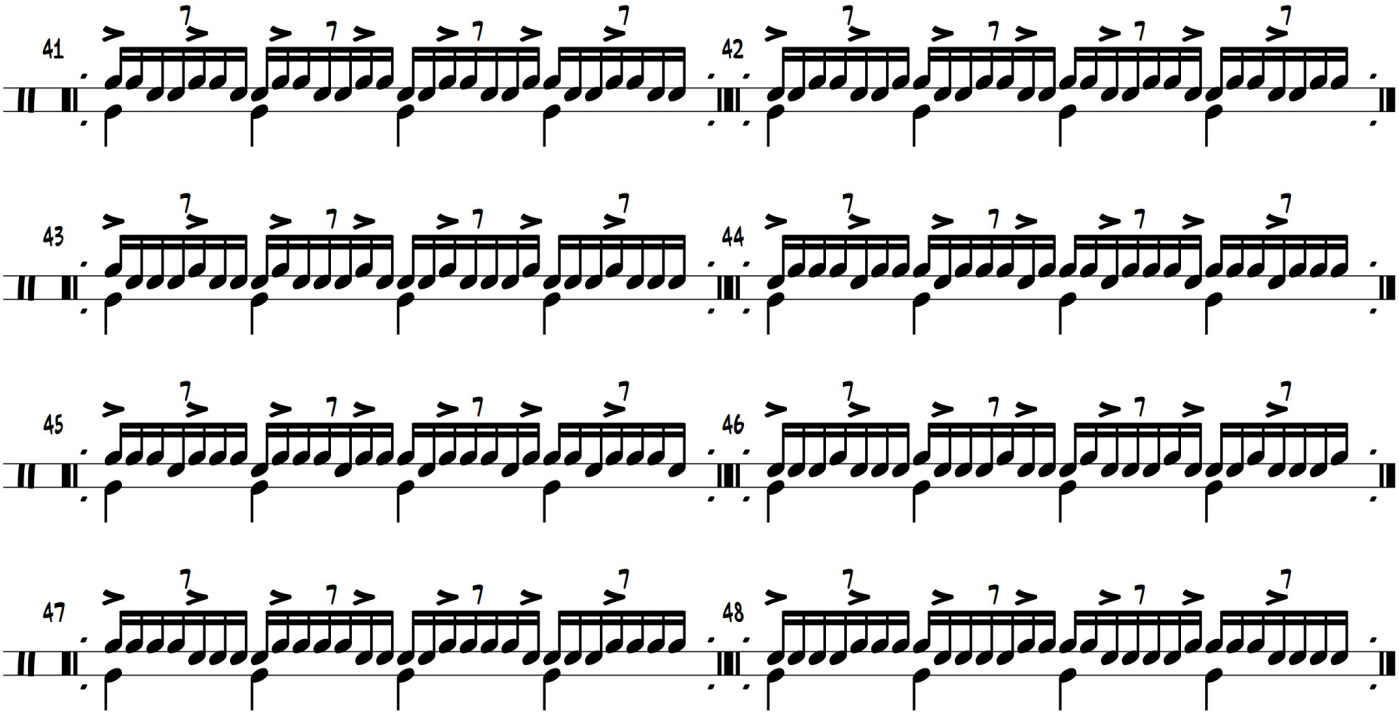
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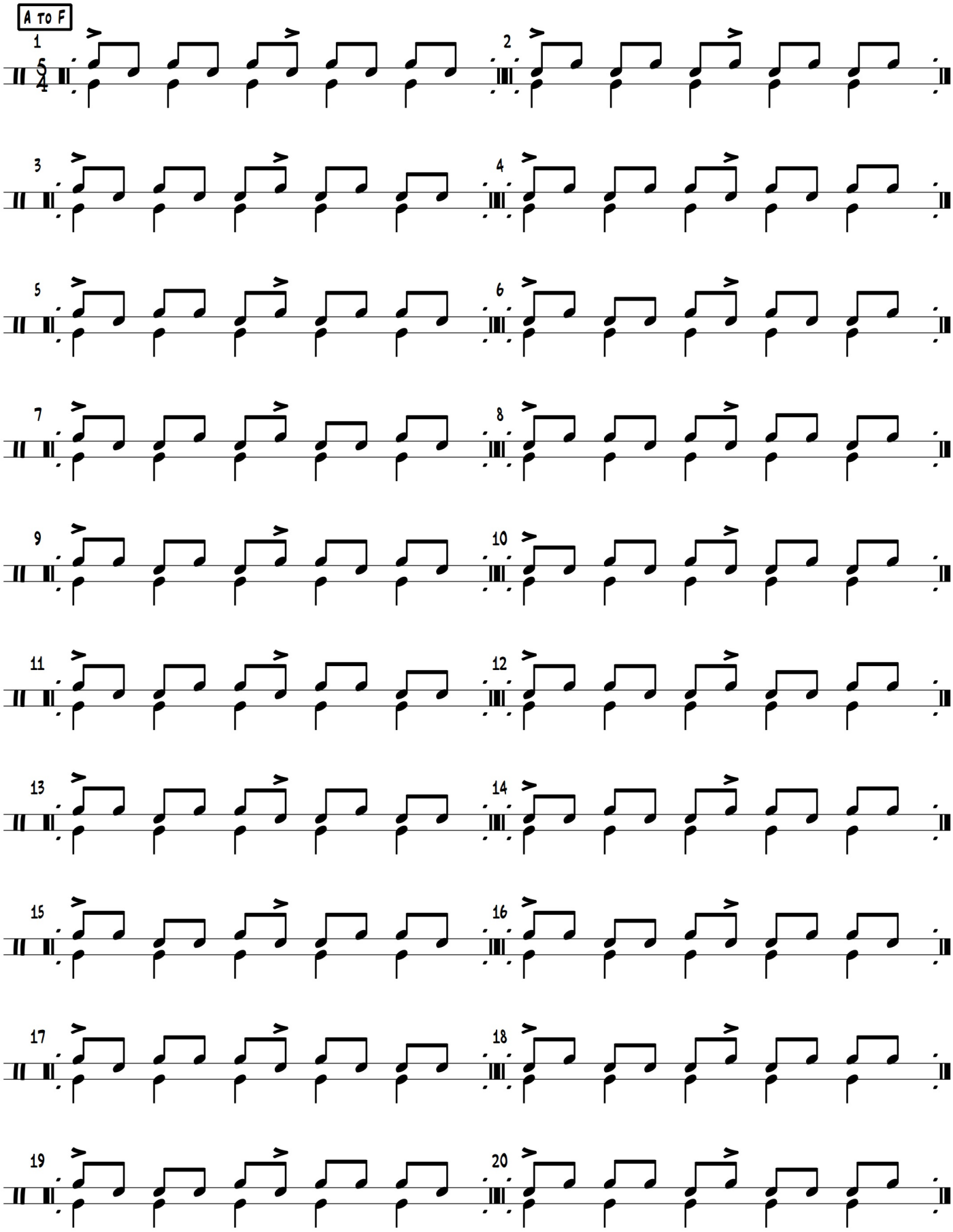
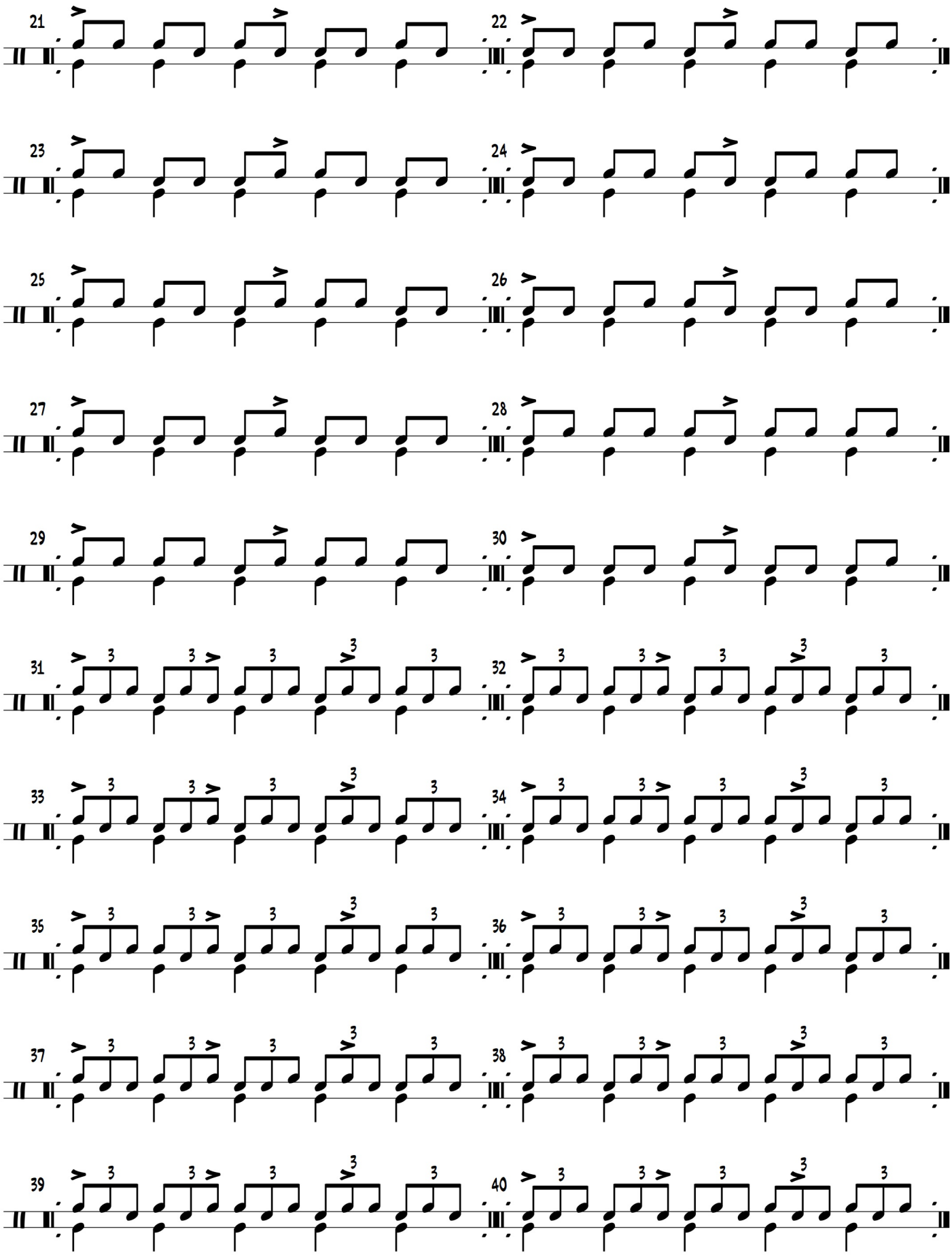
Chapter 3 - The Polyrhythms: 5-meter

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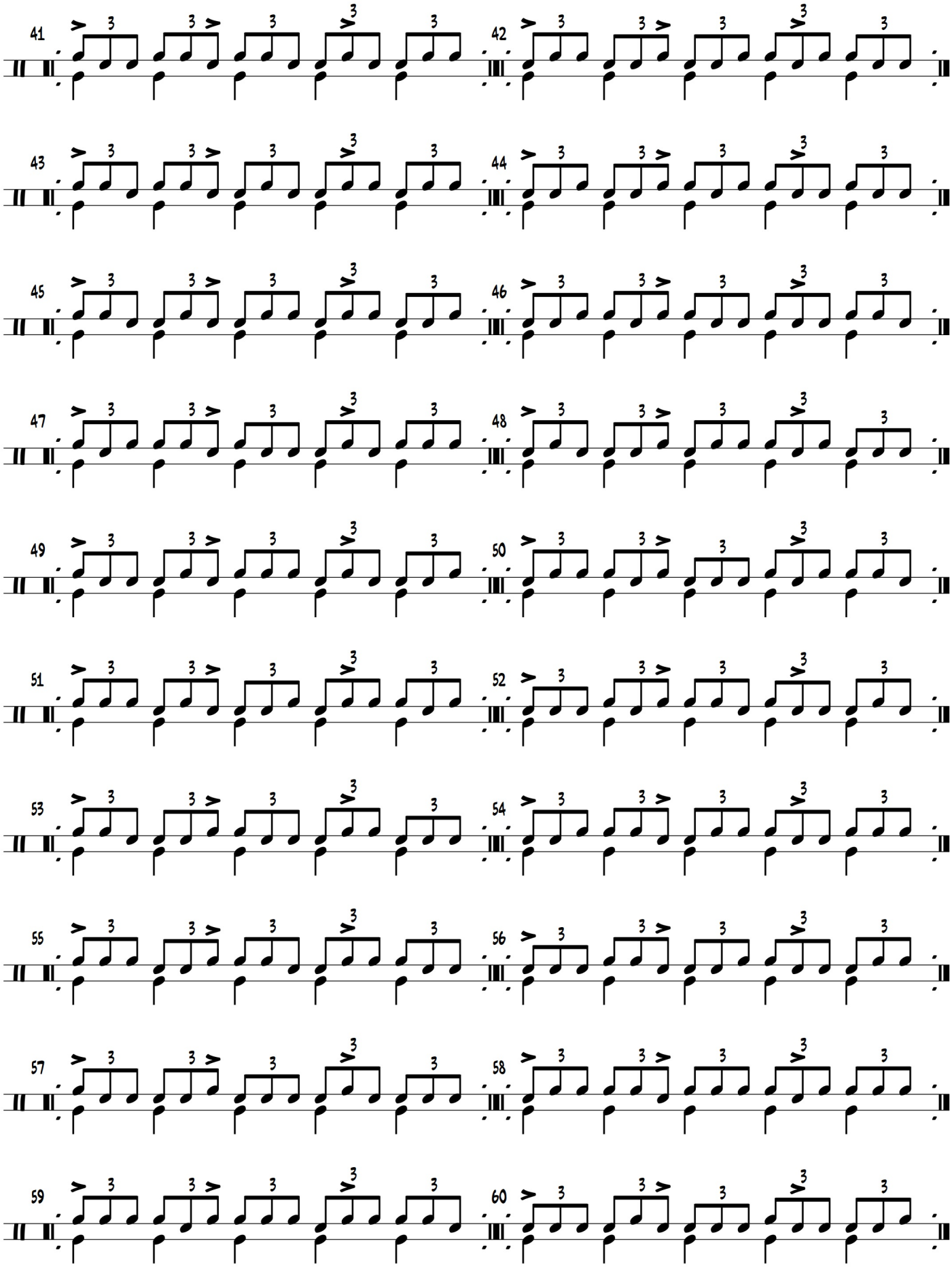
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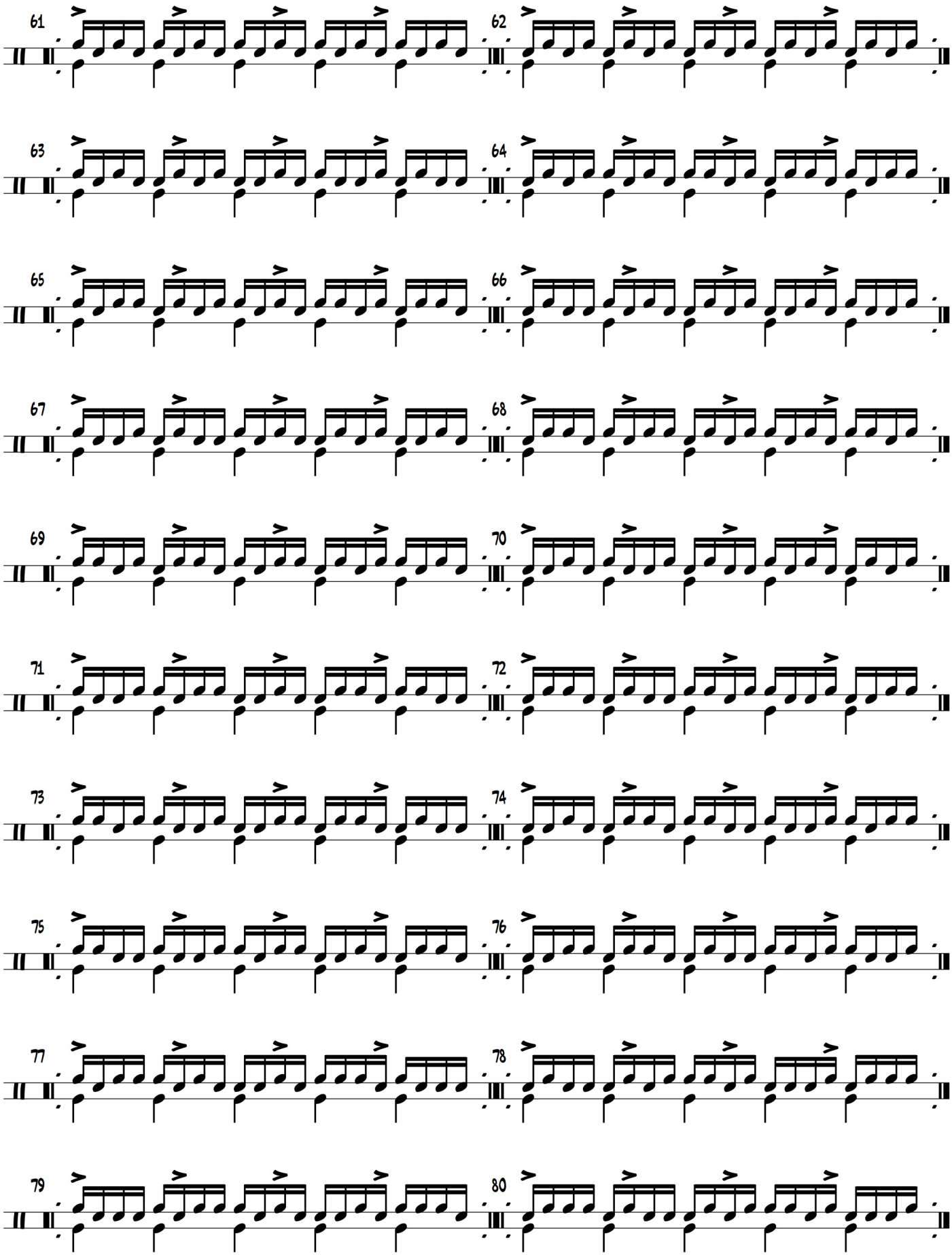
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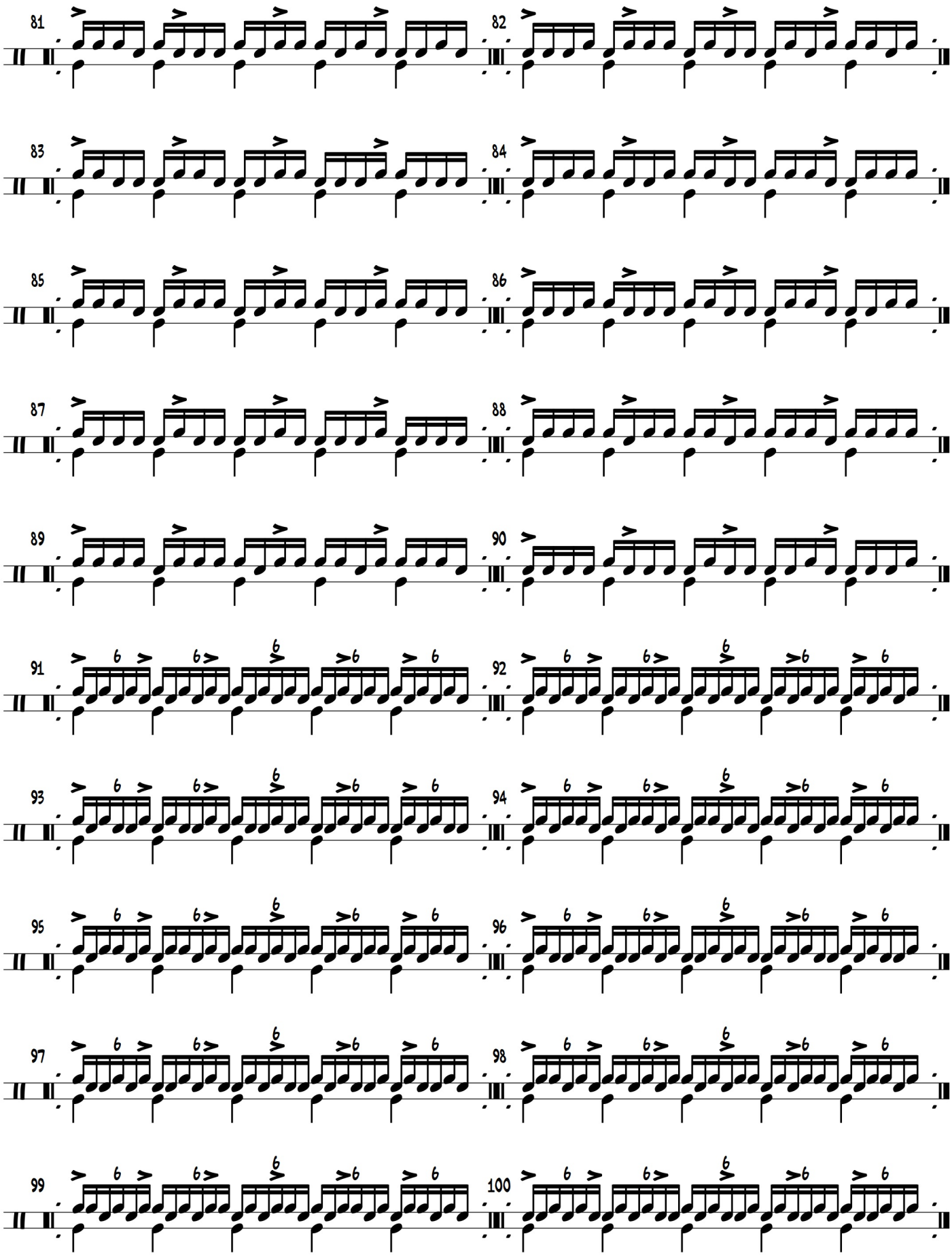
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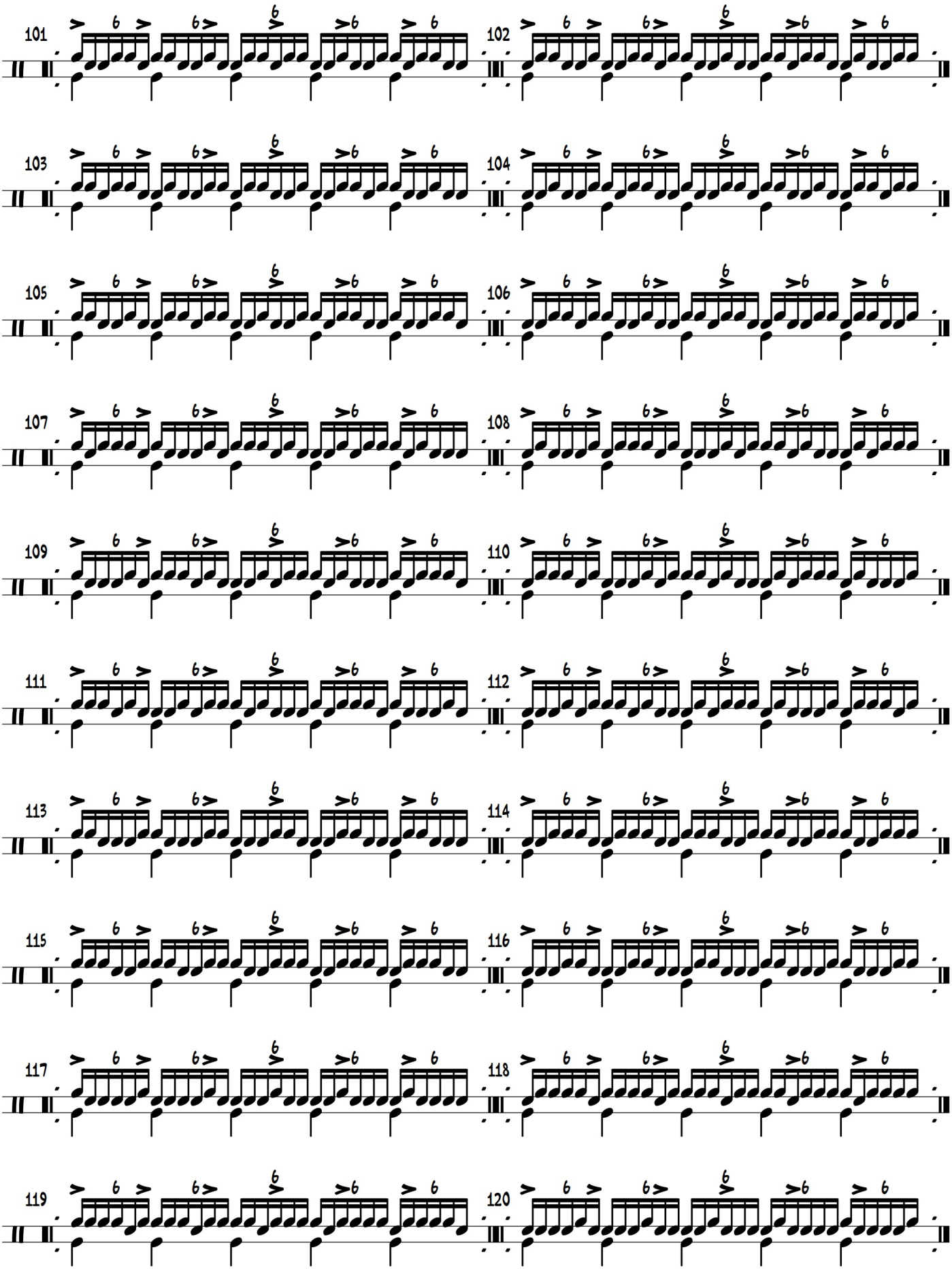
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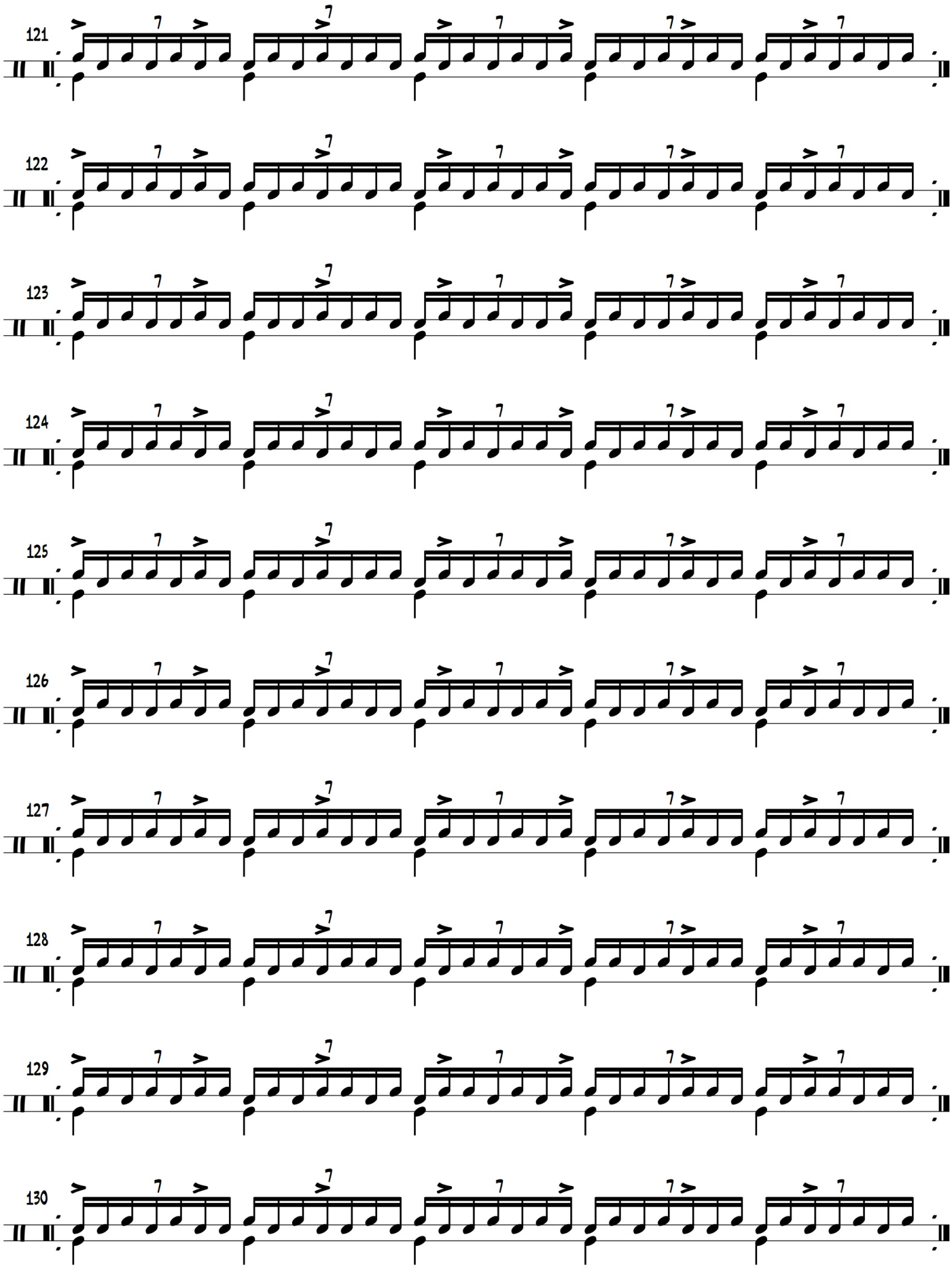
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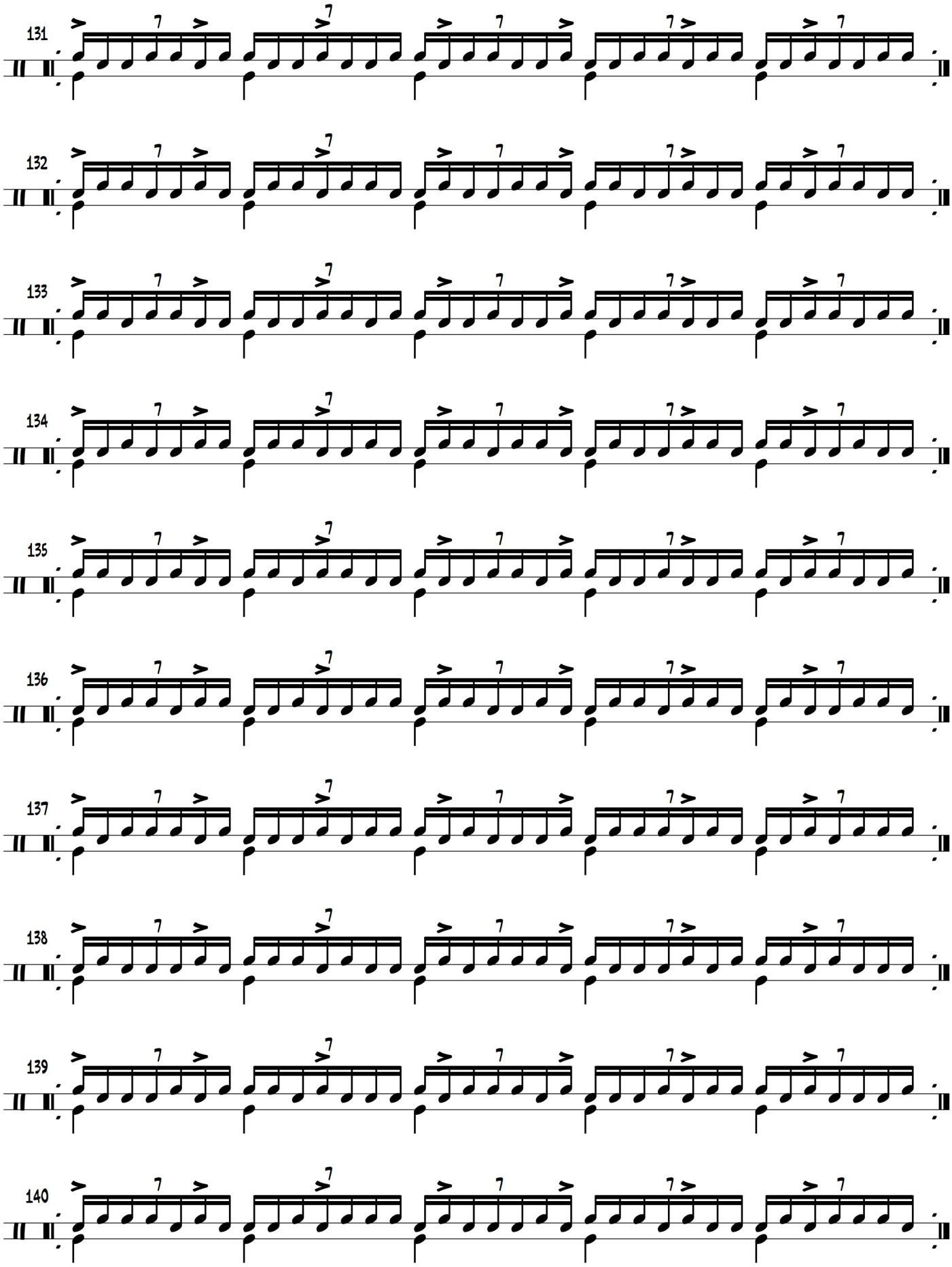
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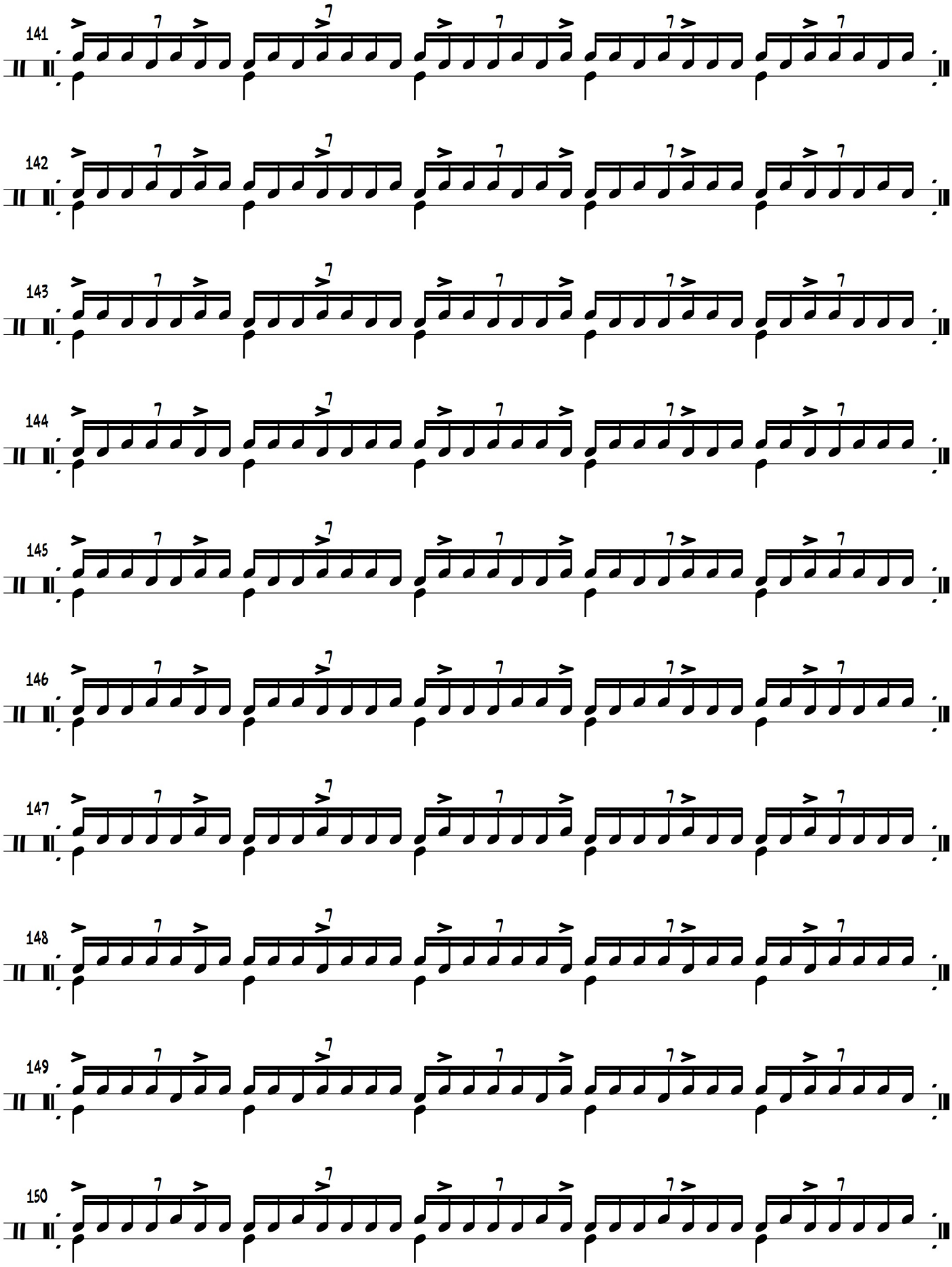
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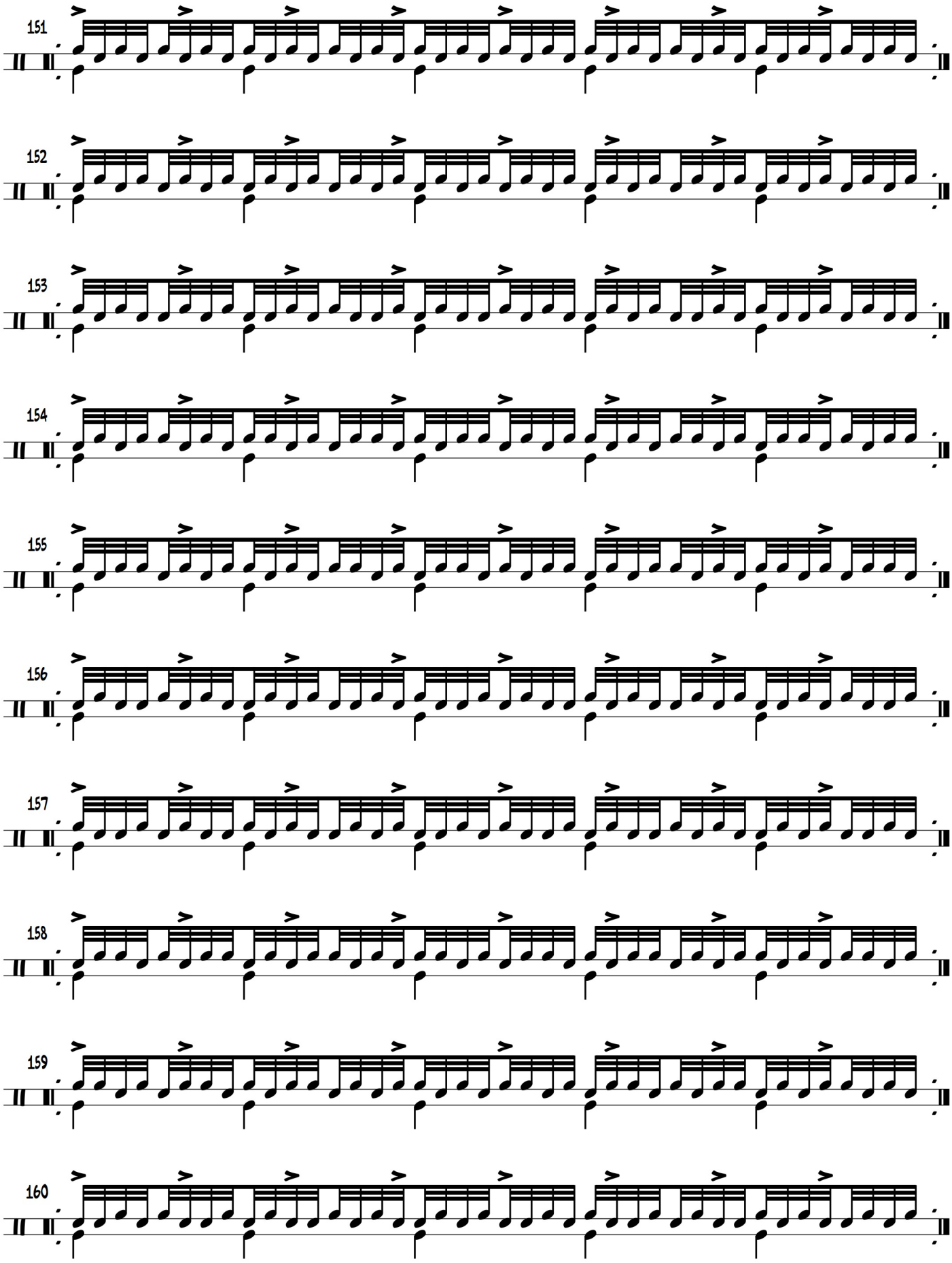
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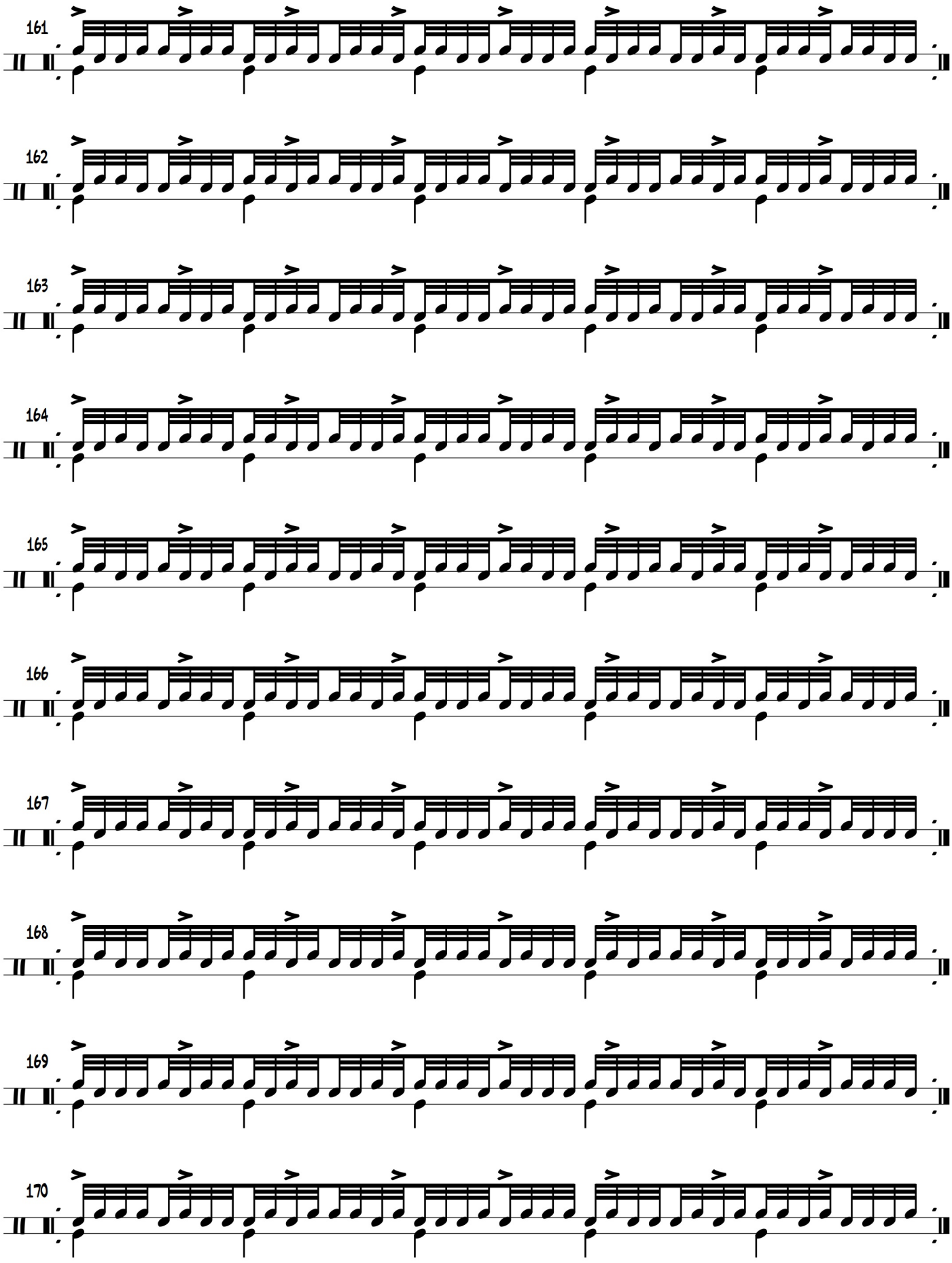
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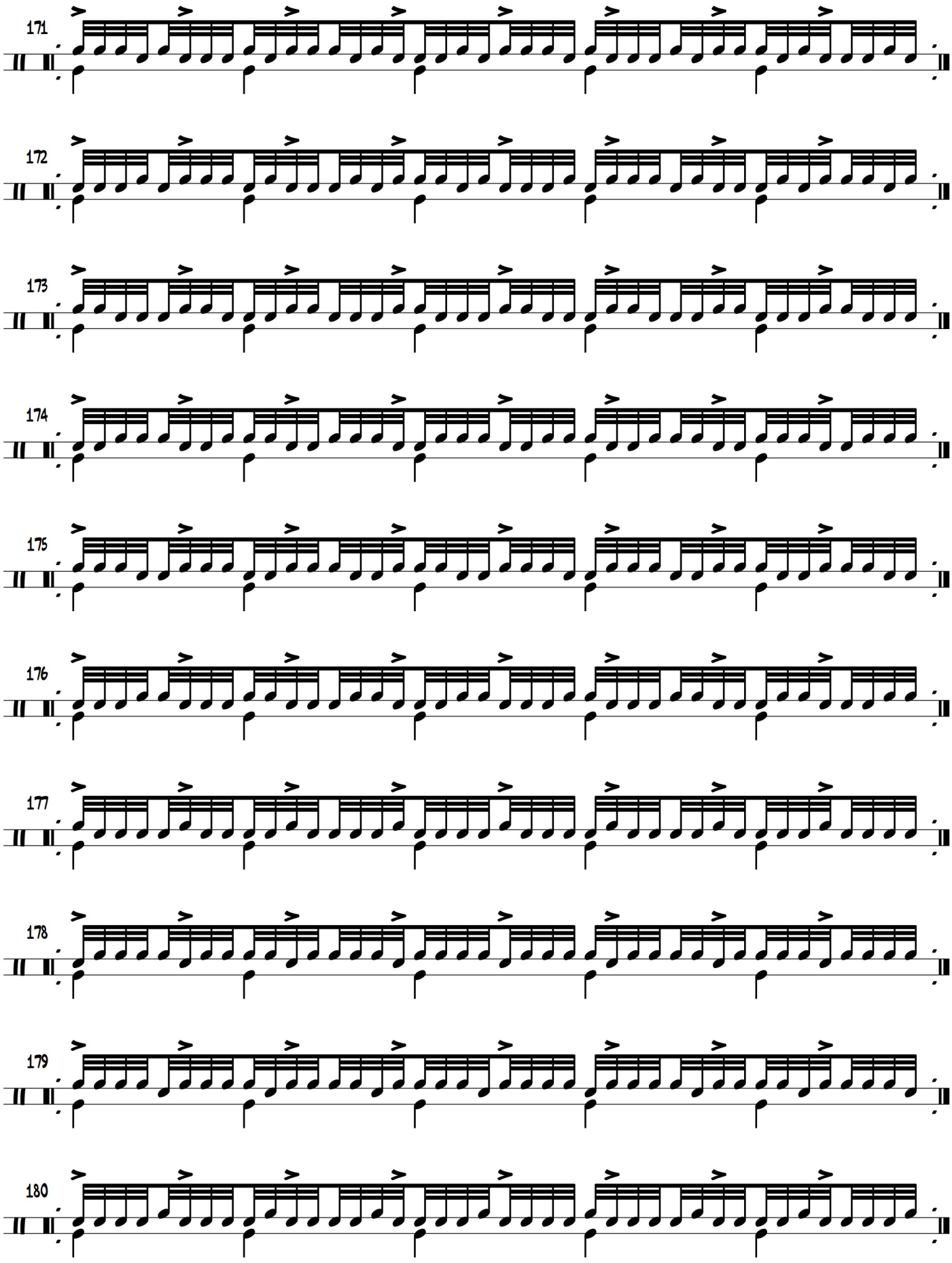
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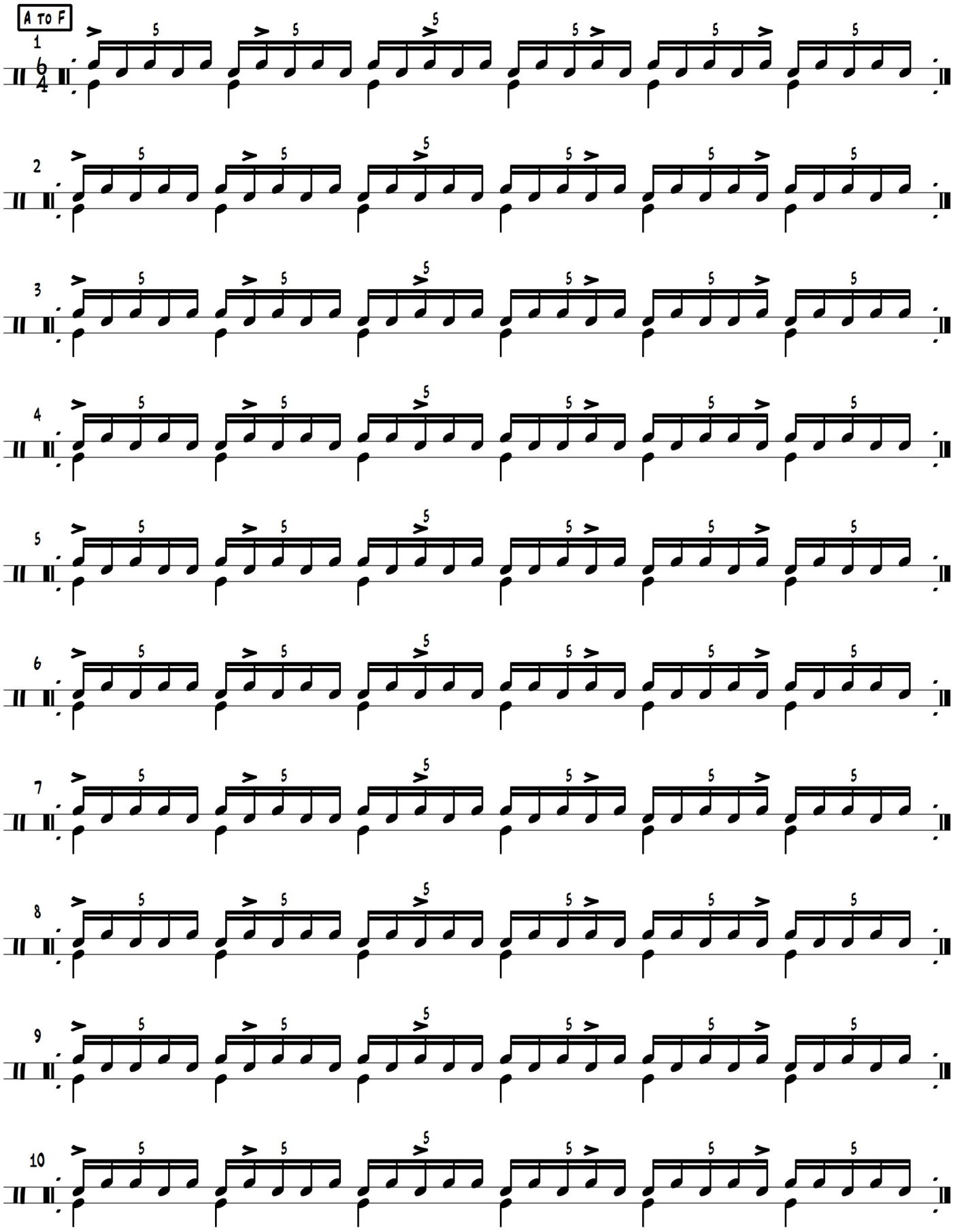
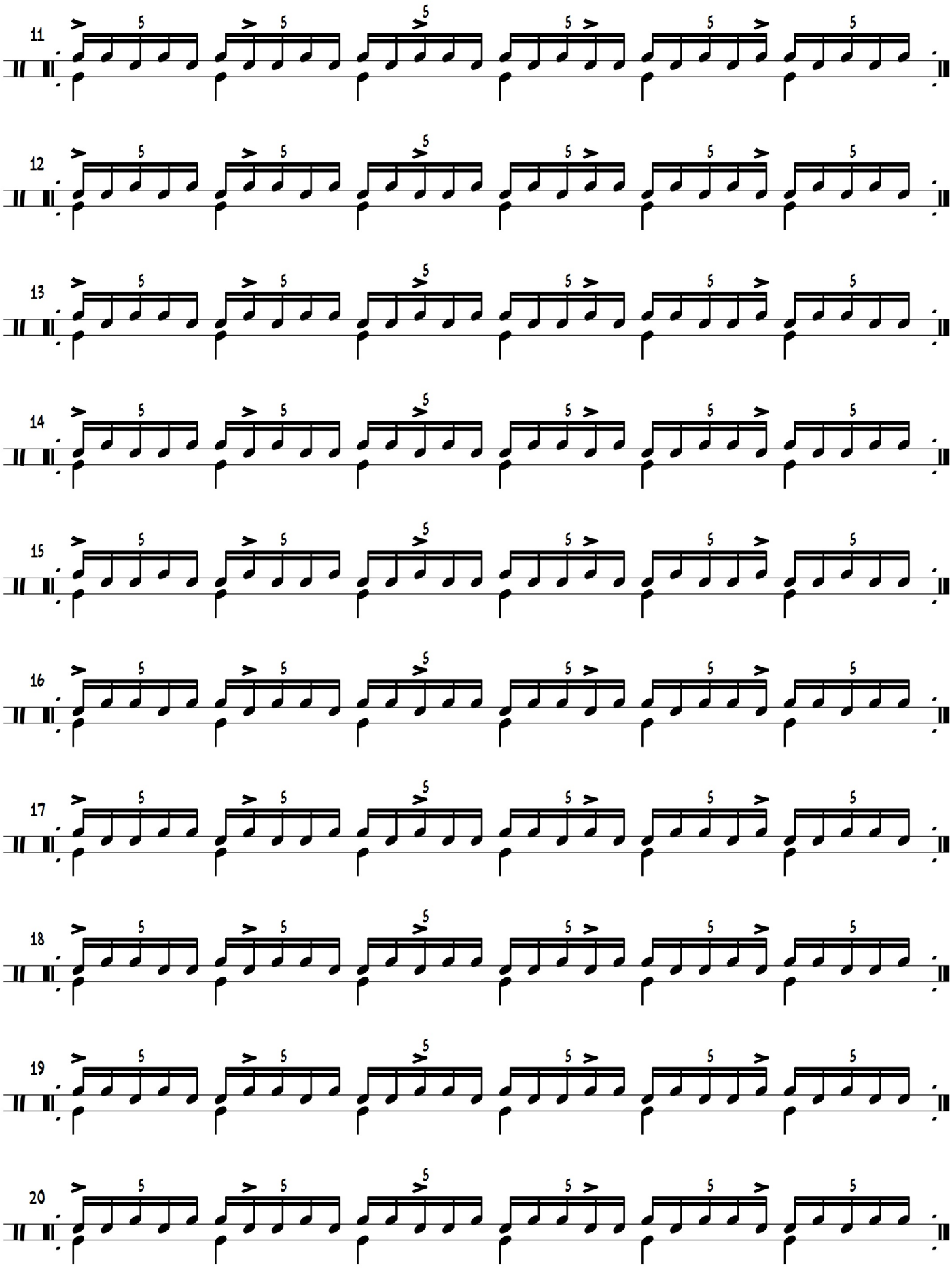
Chapter 3 - The Polyrhythms: 6-meter

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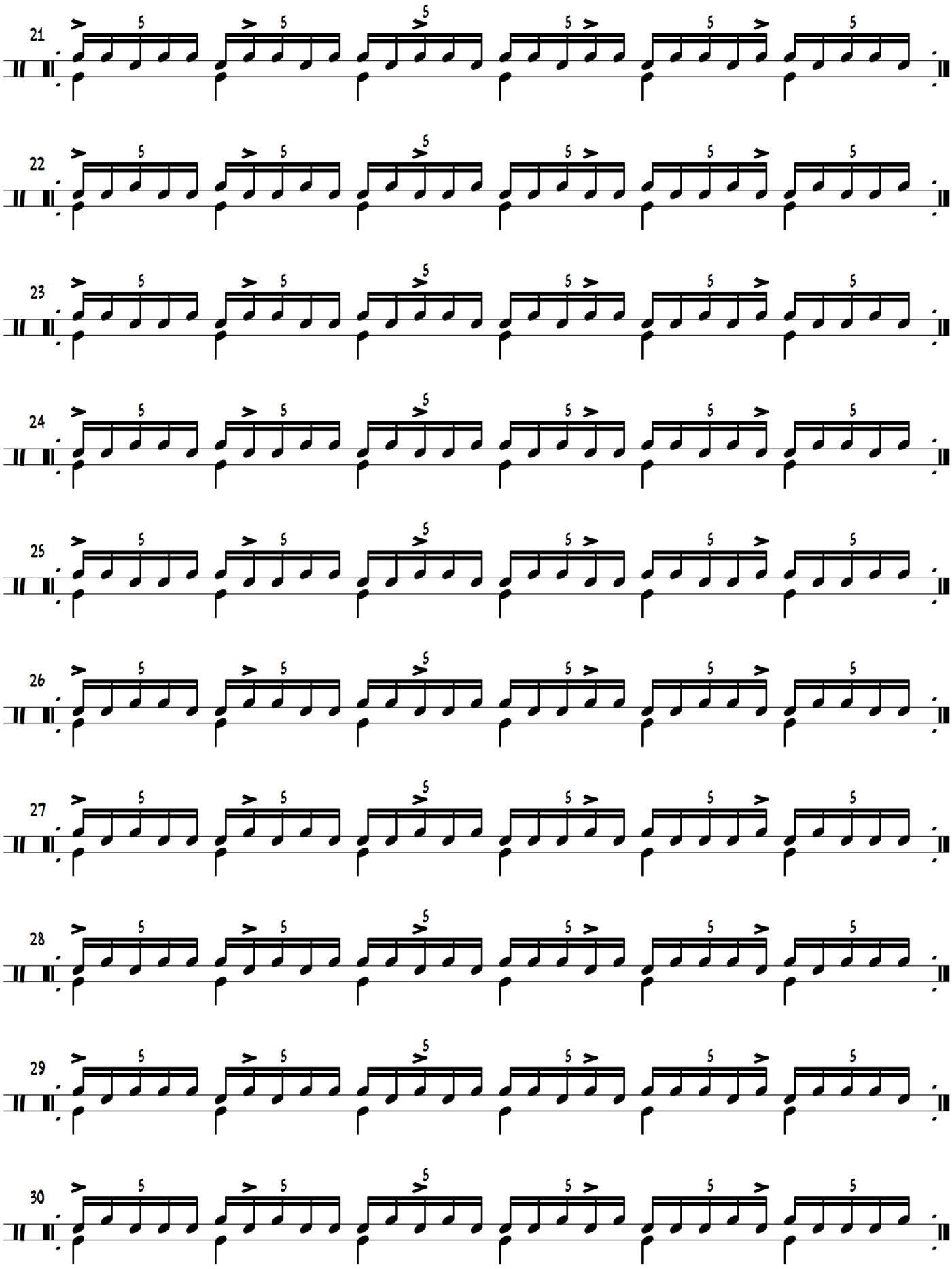
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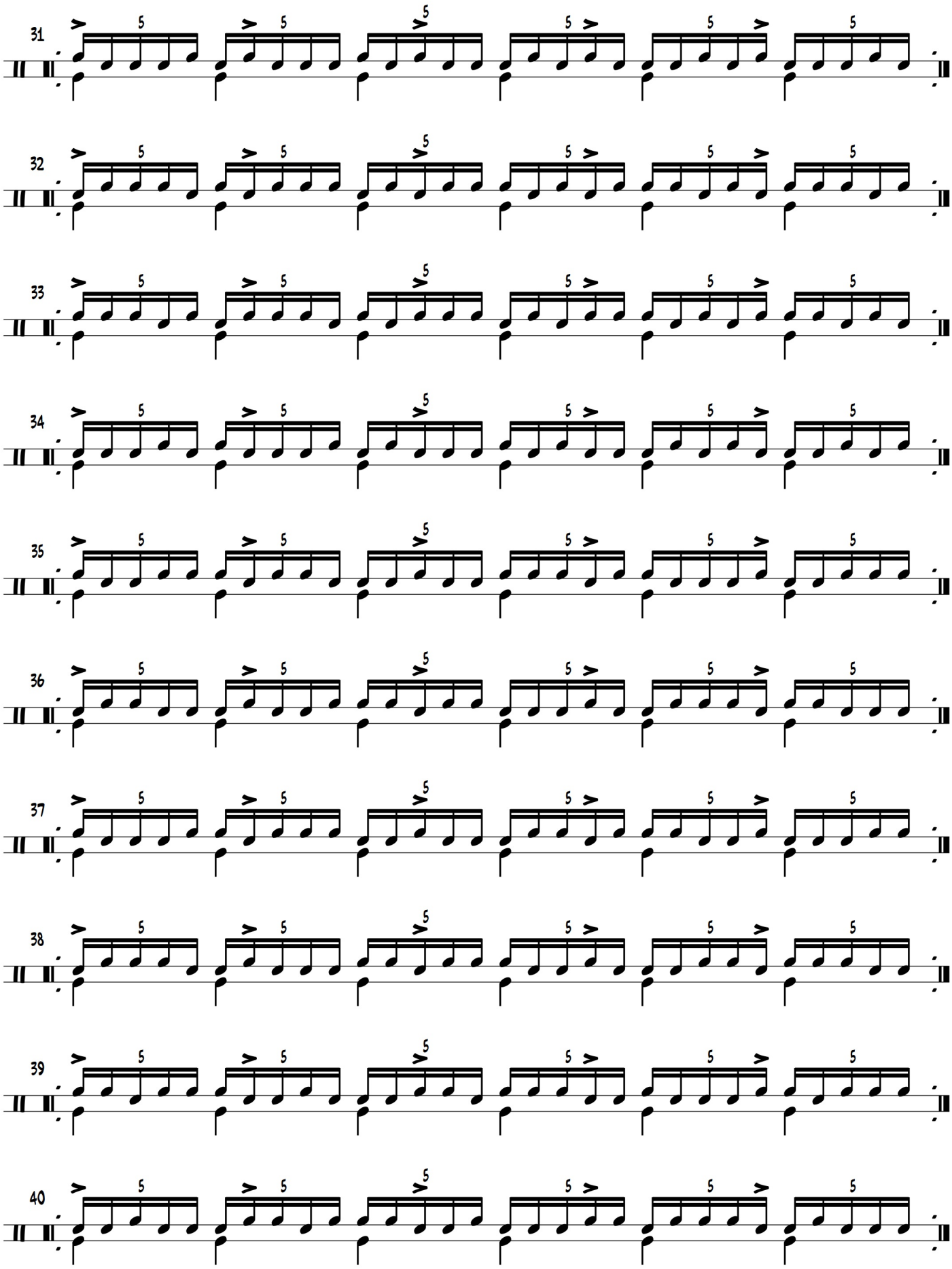
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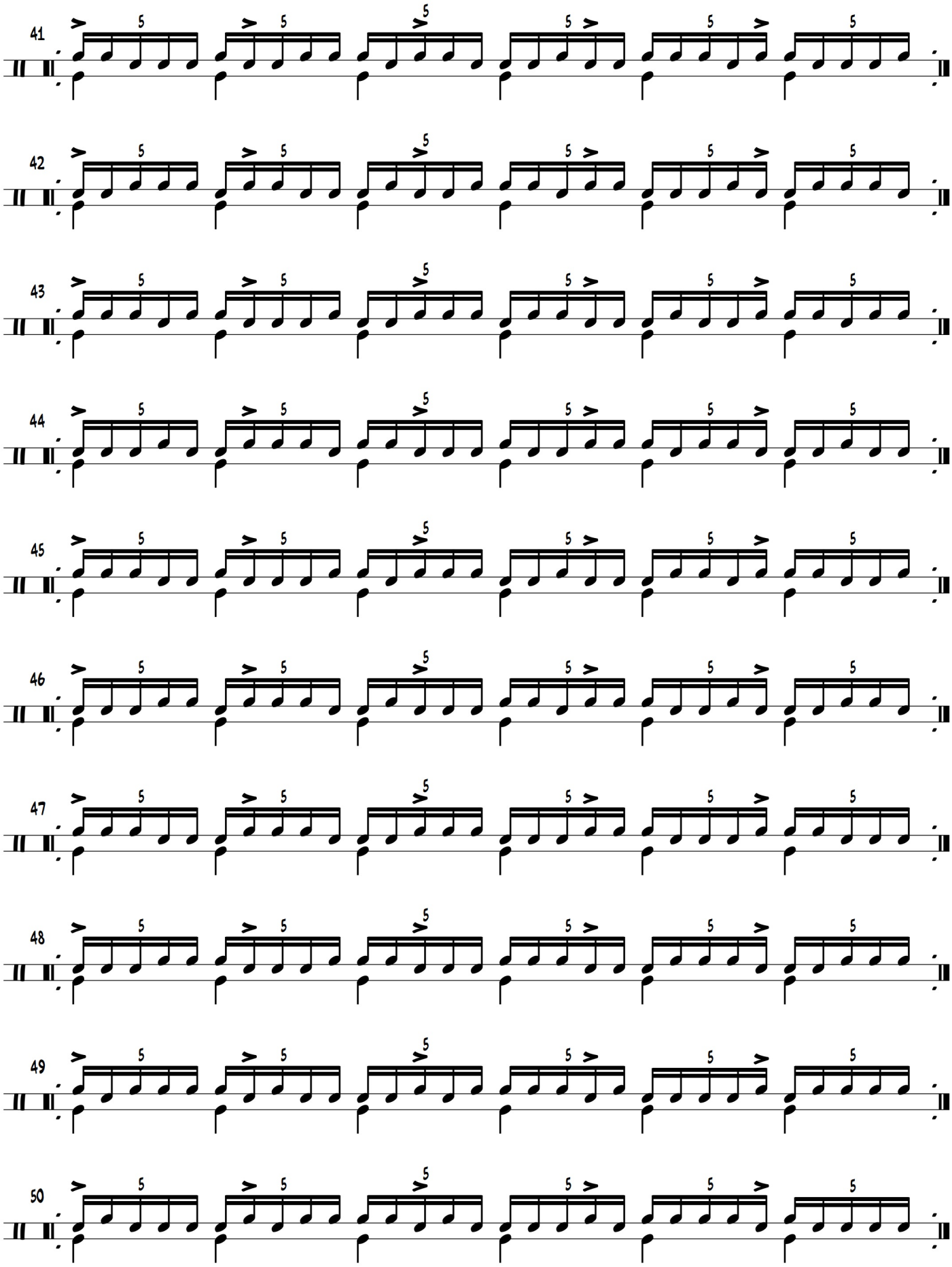
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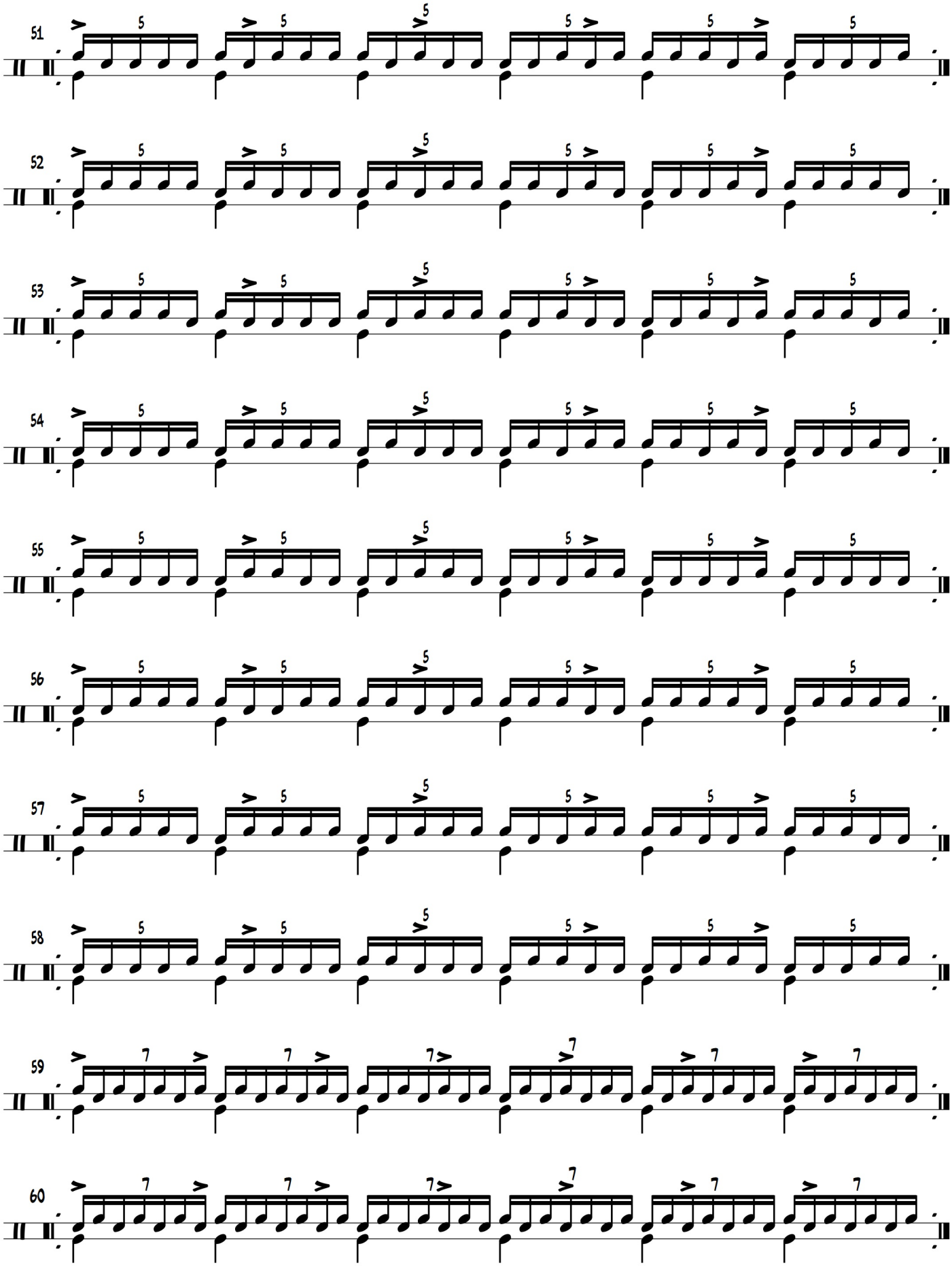
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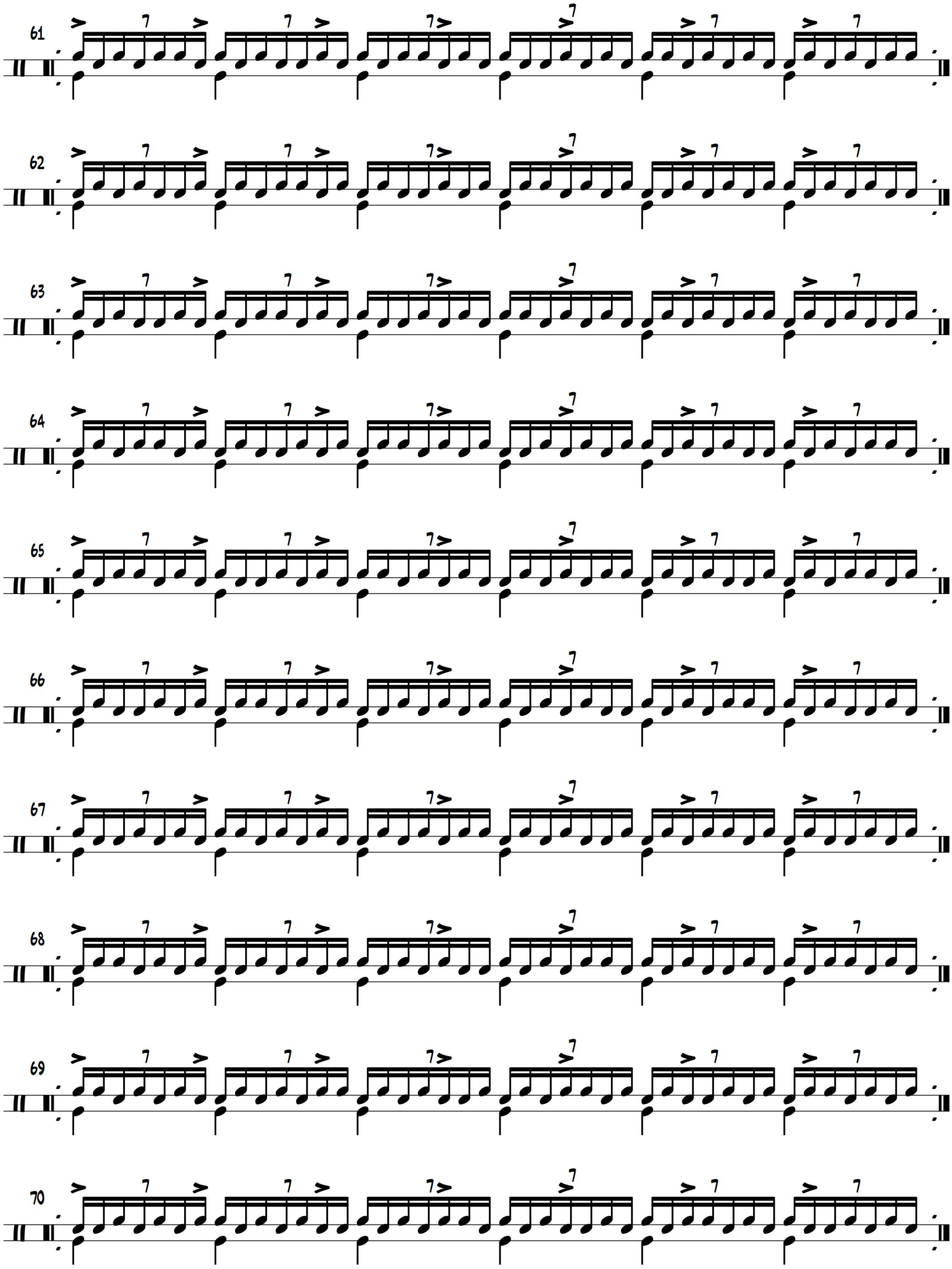
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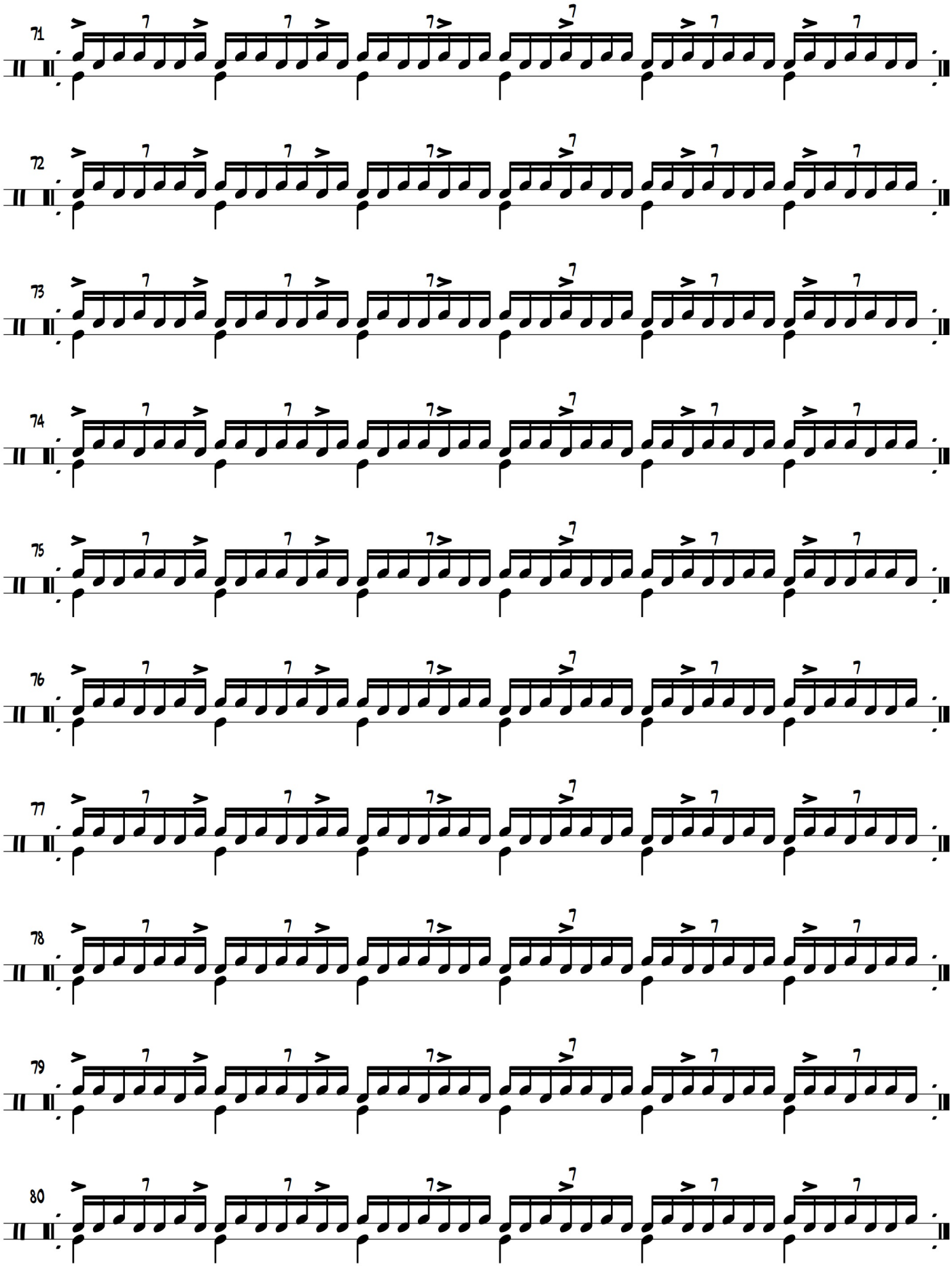
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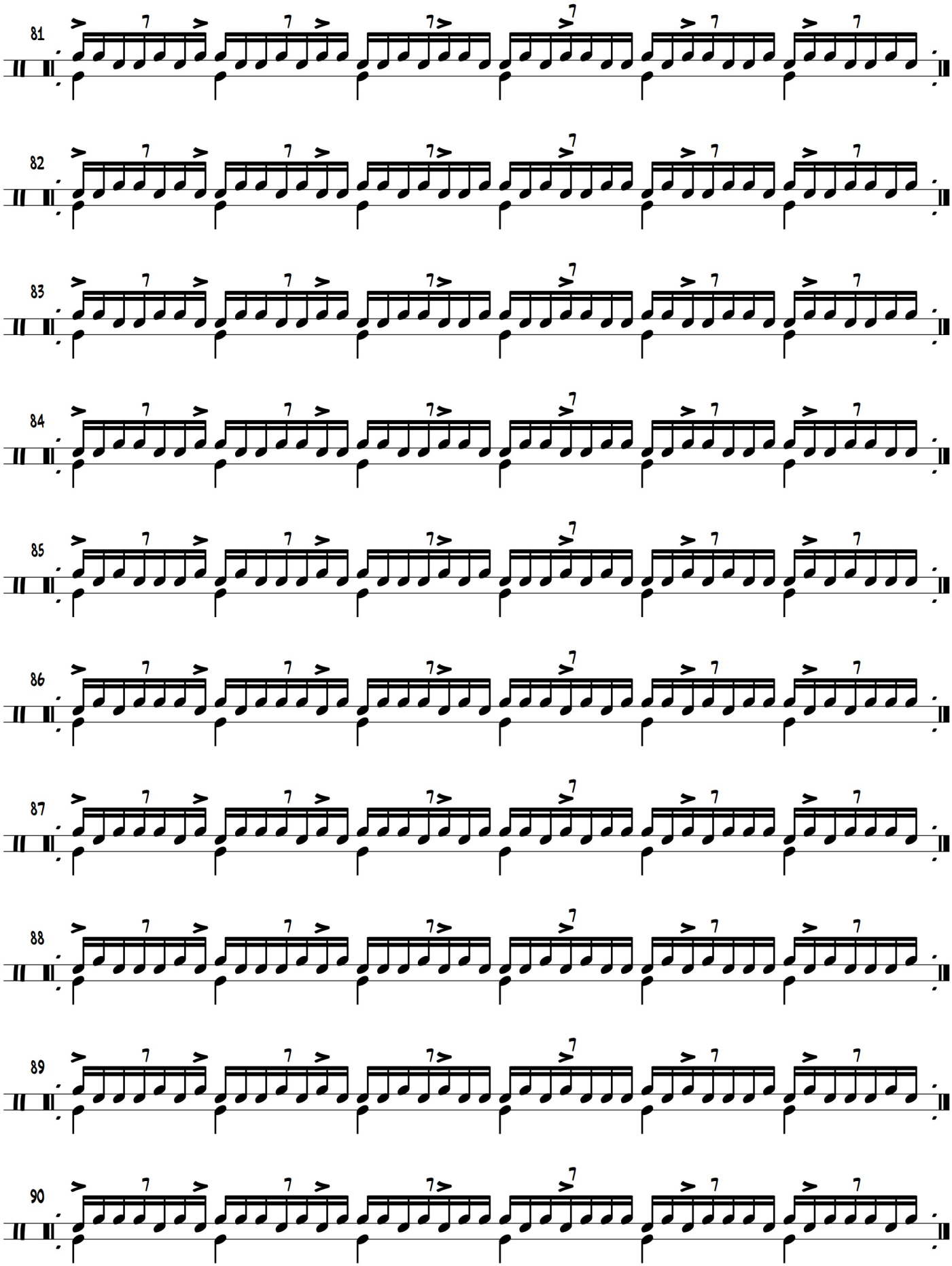
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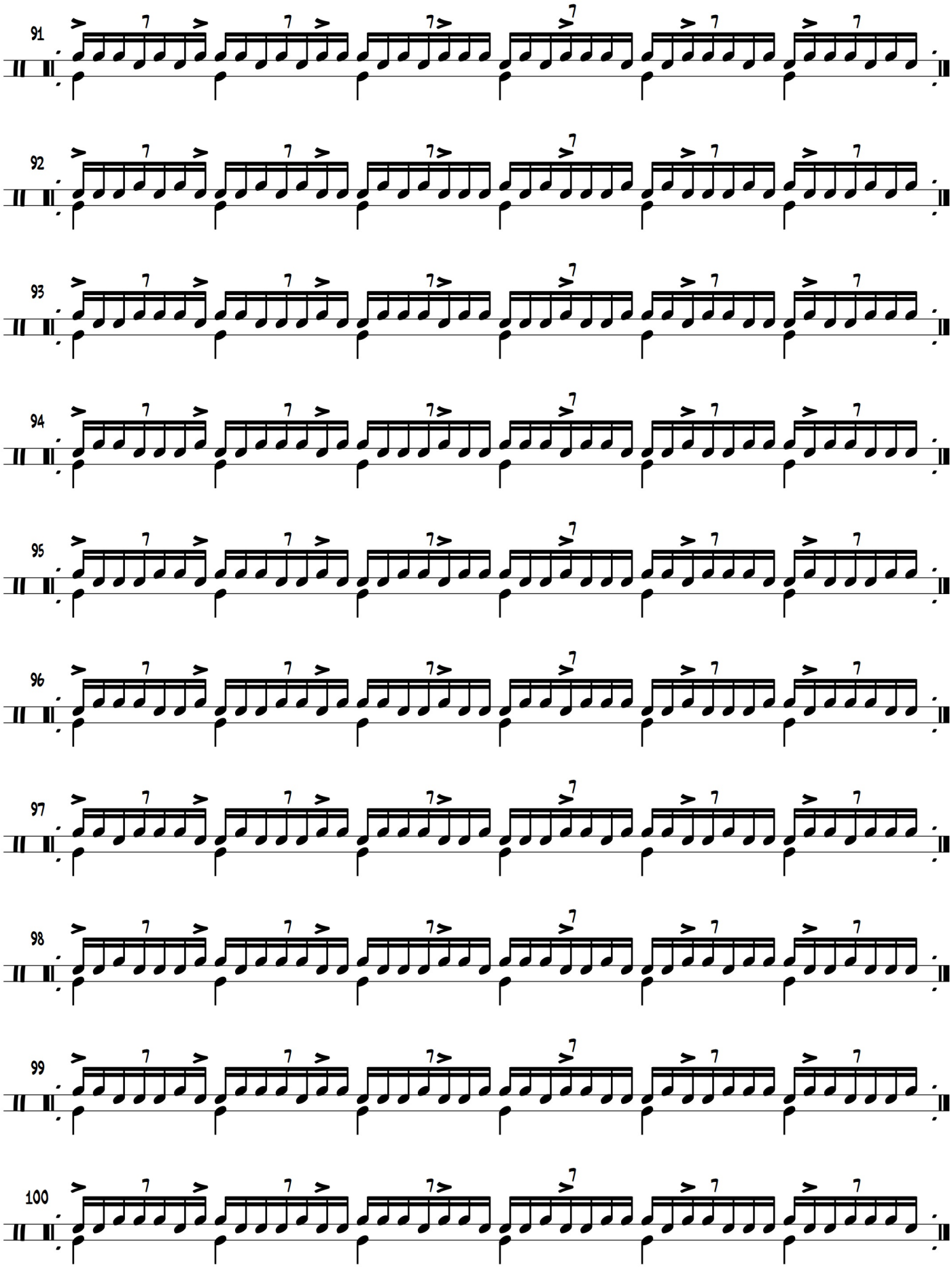
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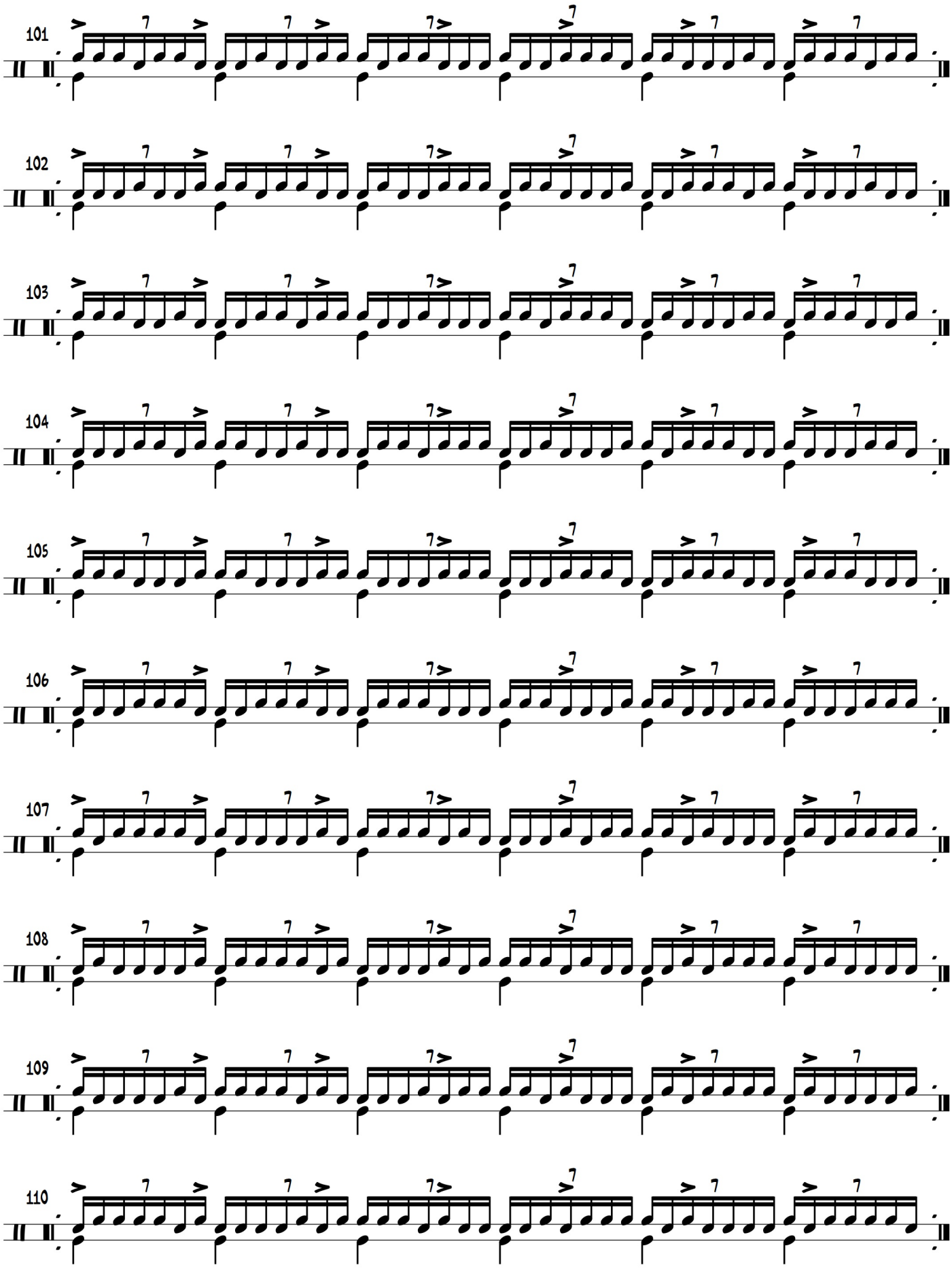
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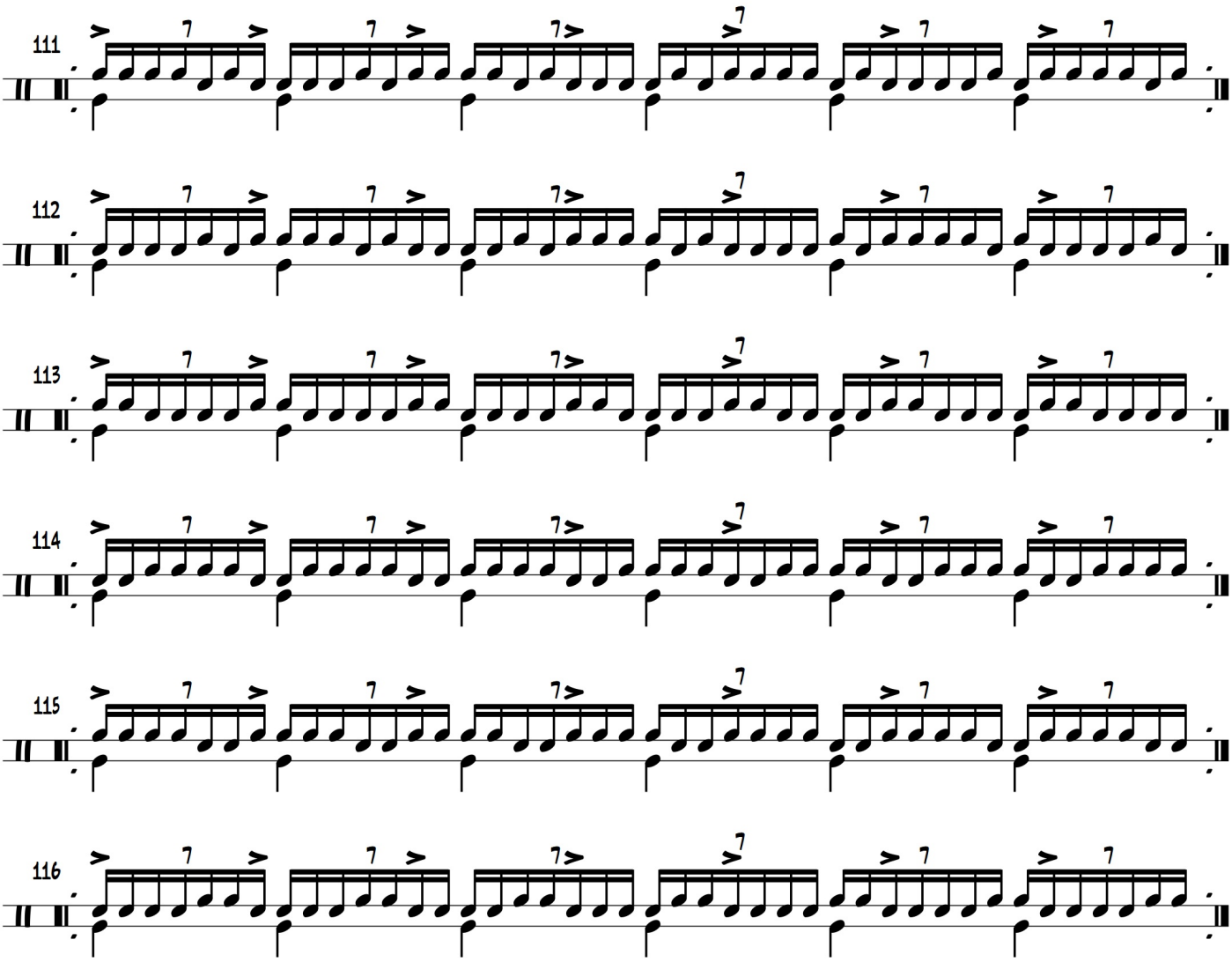
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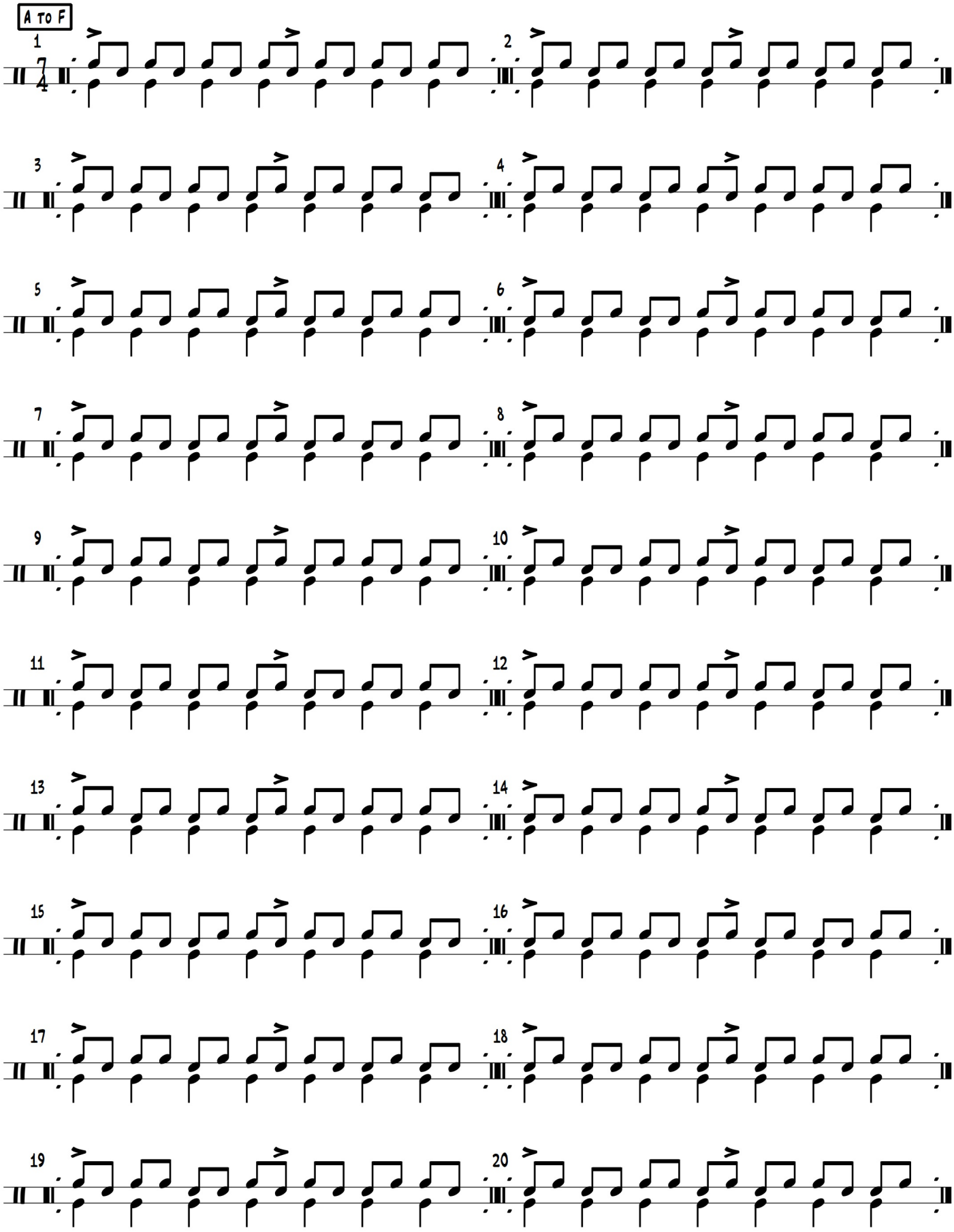
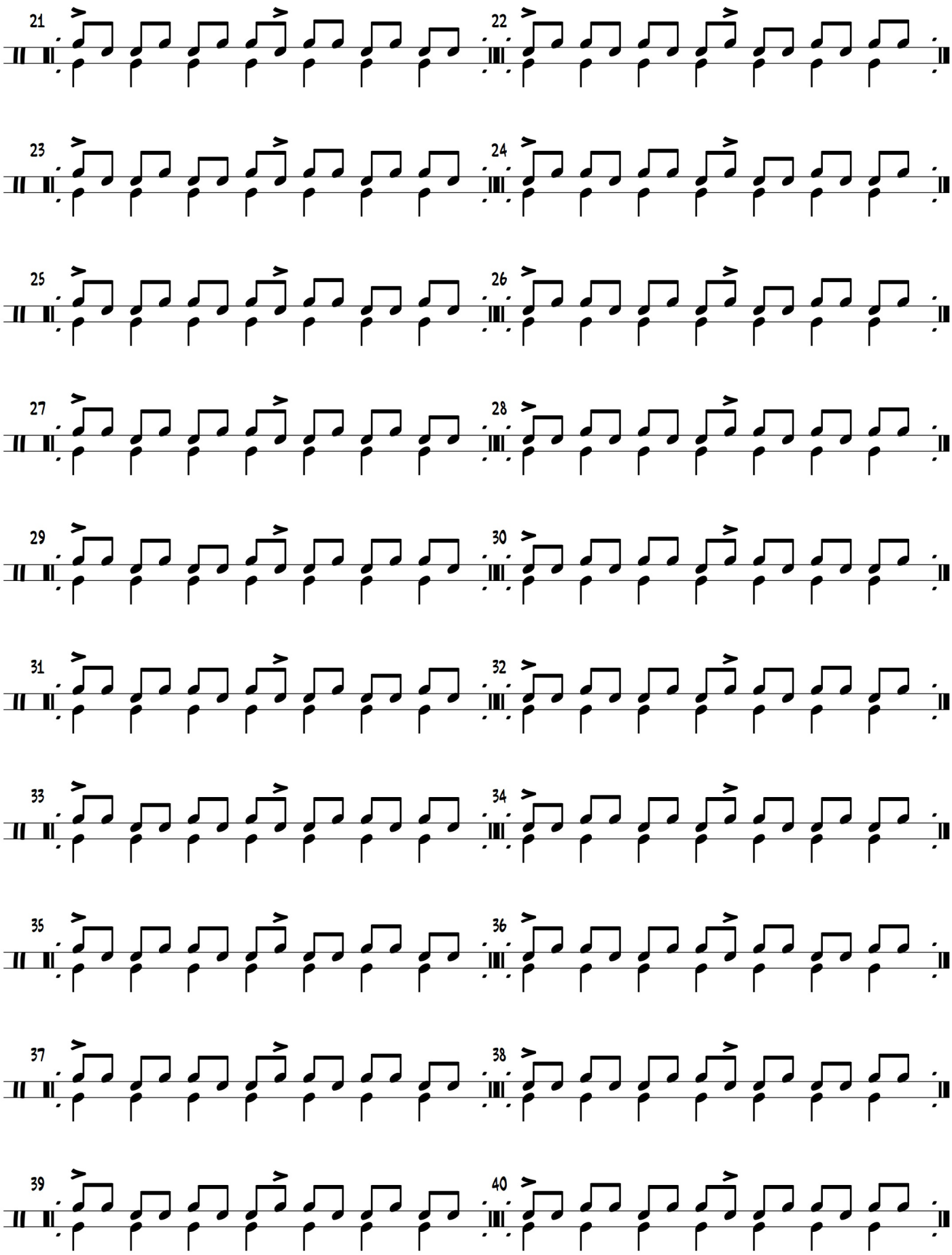
Chapter 3 - The Polyrhythms: 7-meter

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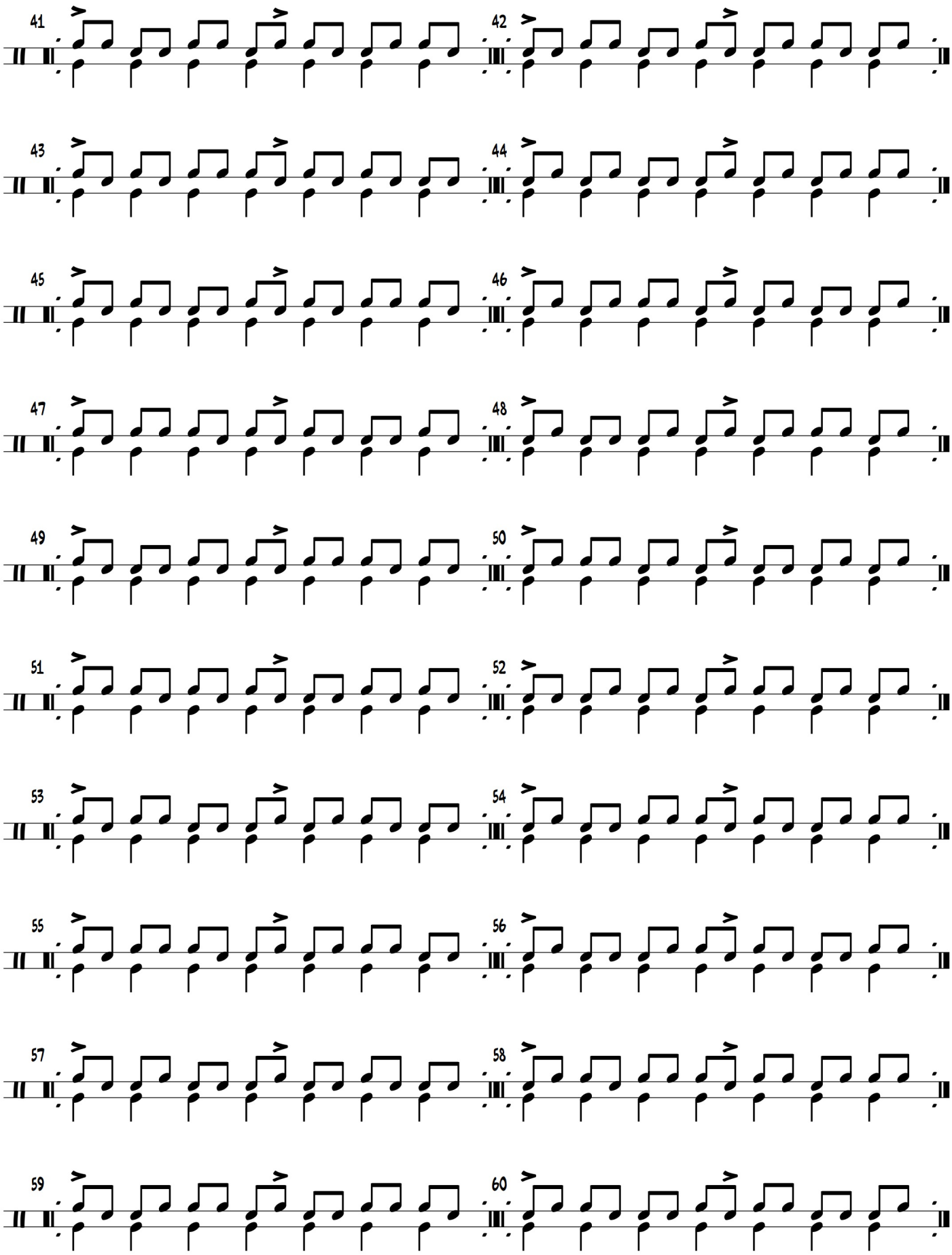
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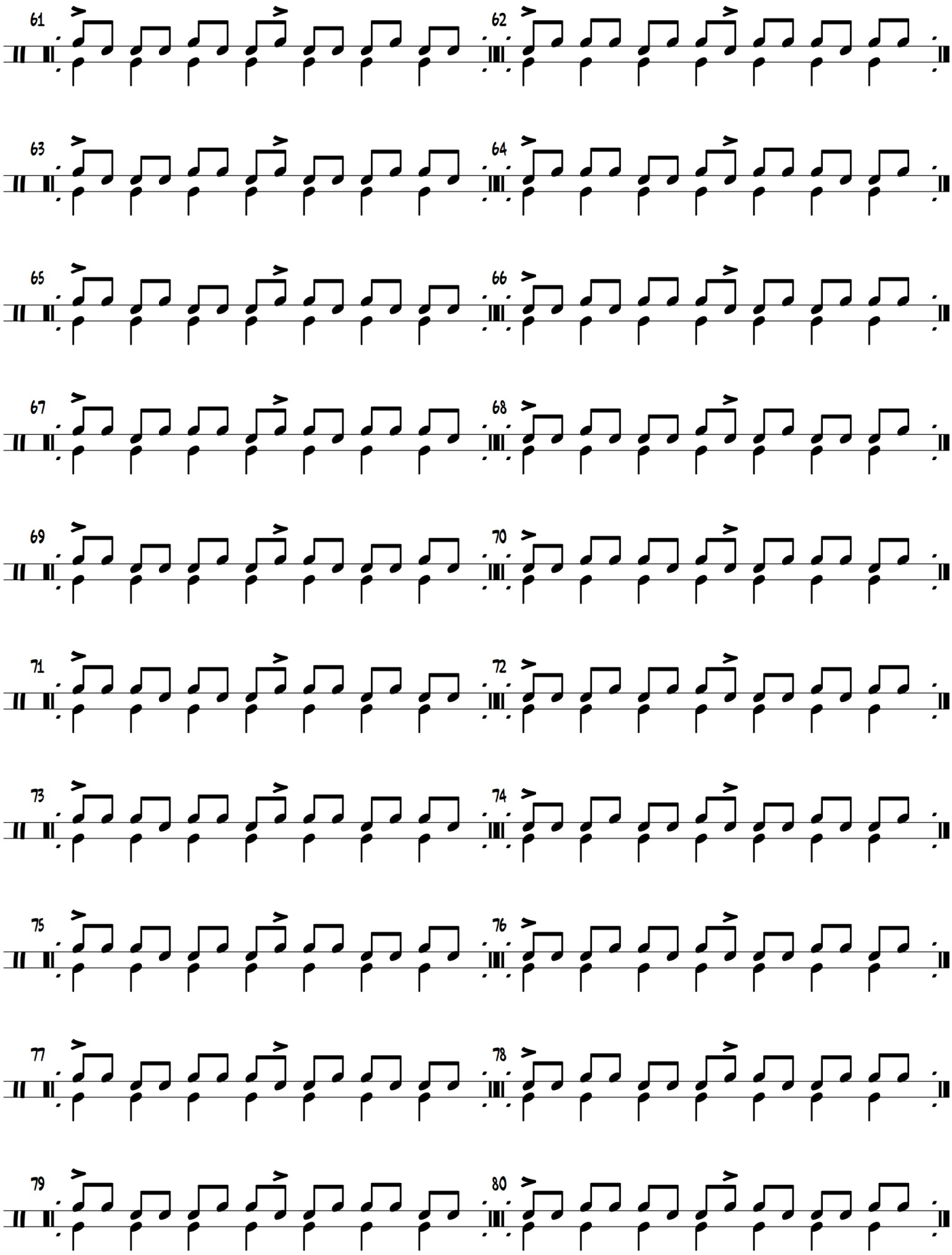
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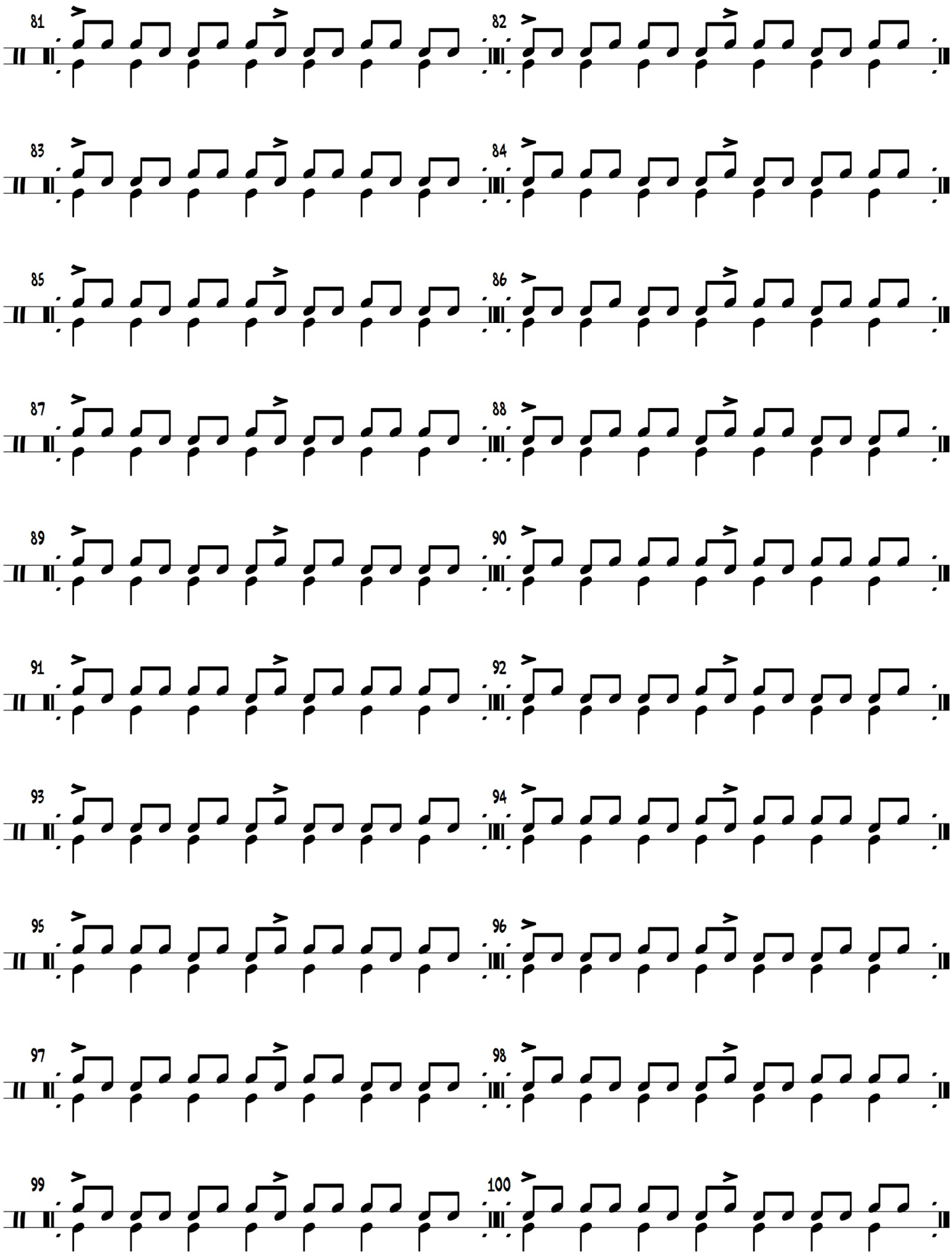
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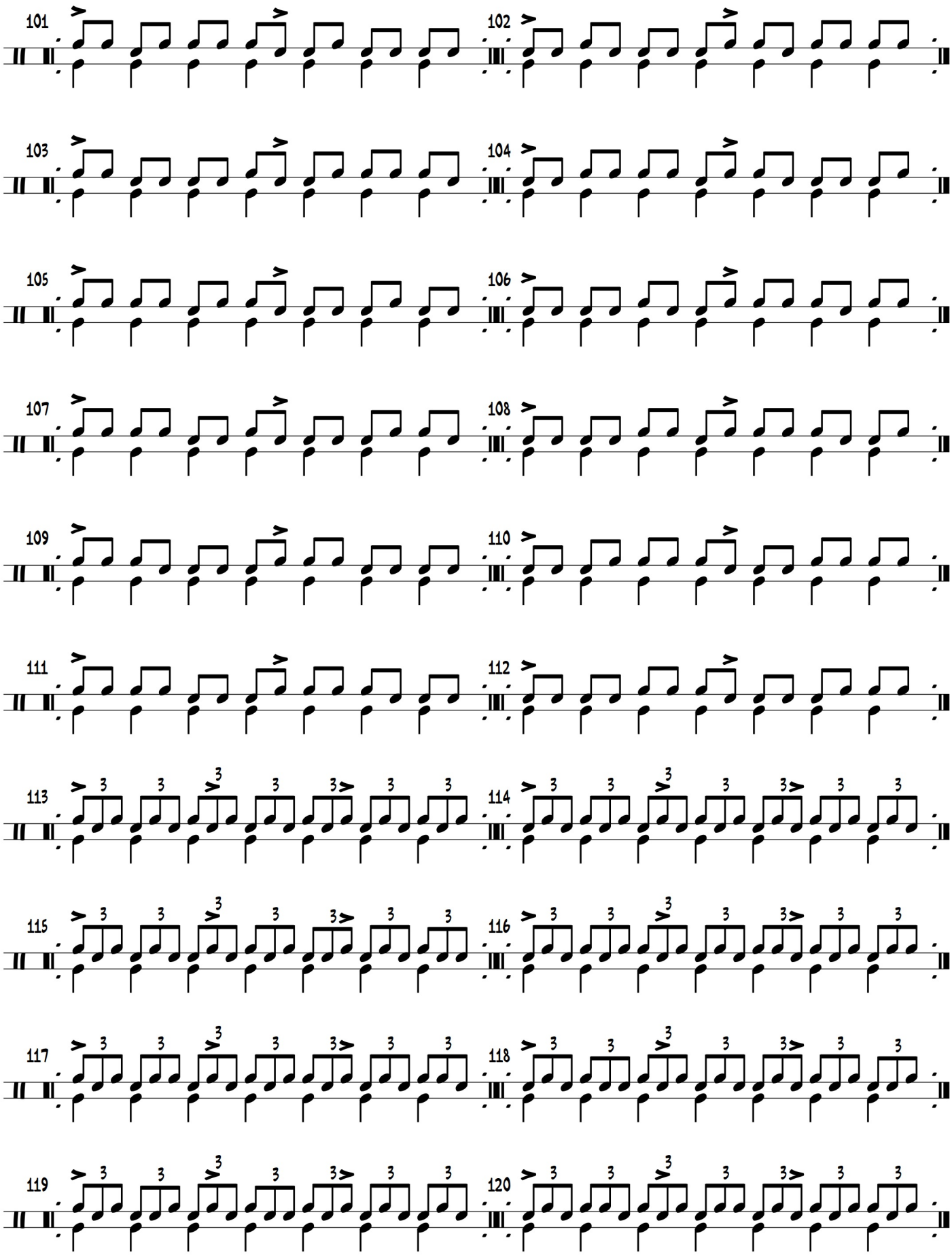
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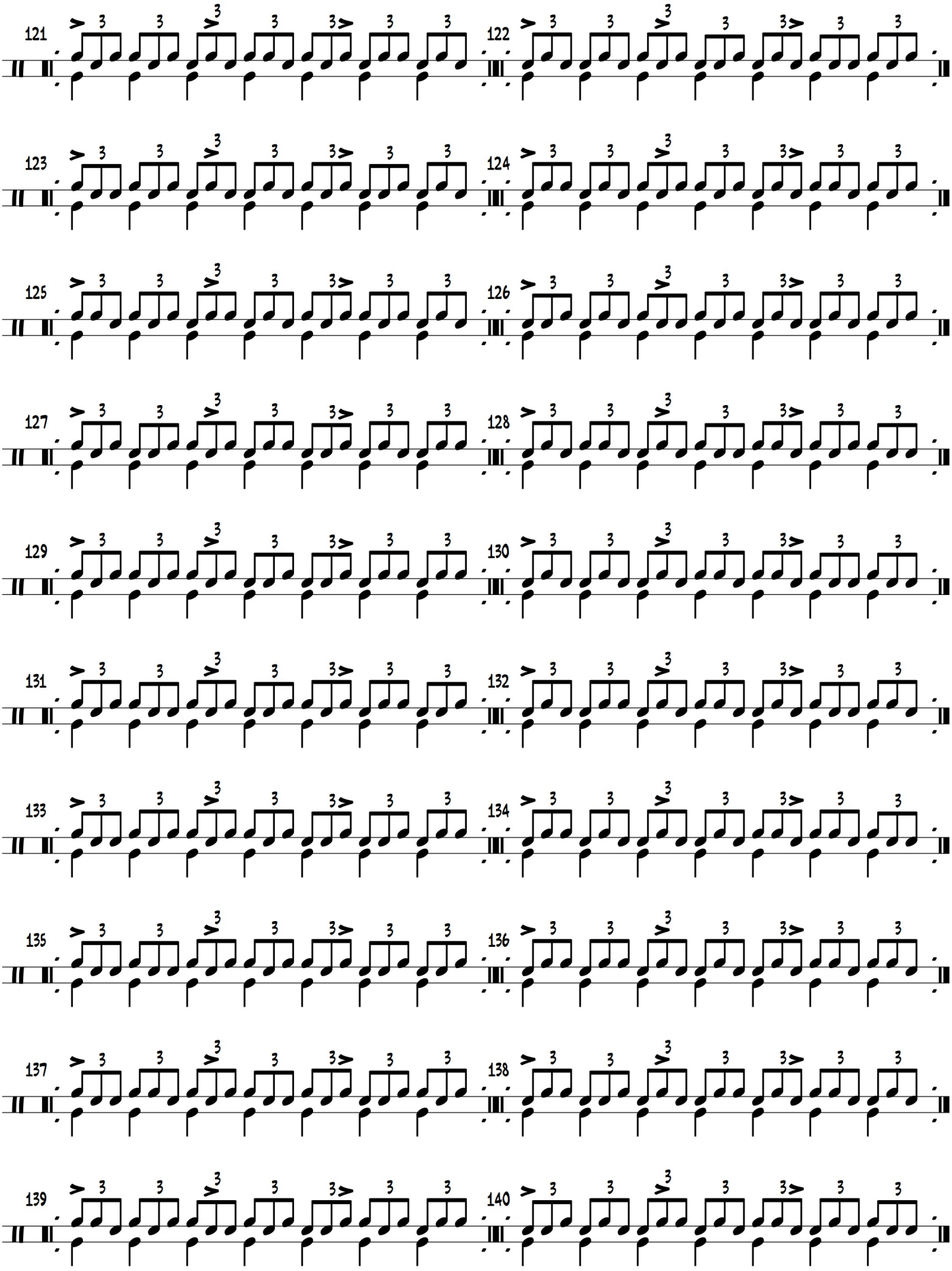
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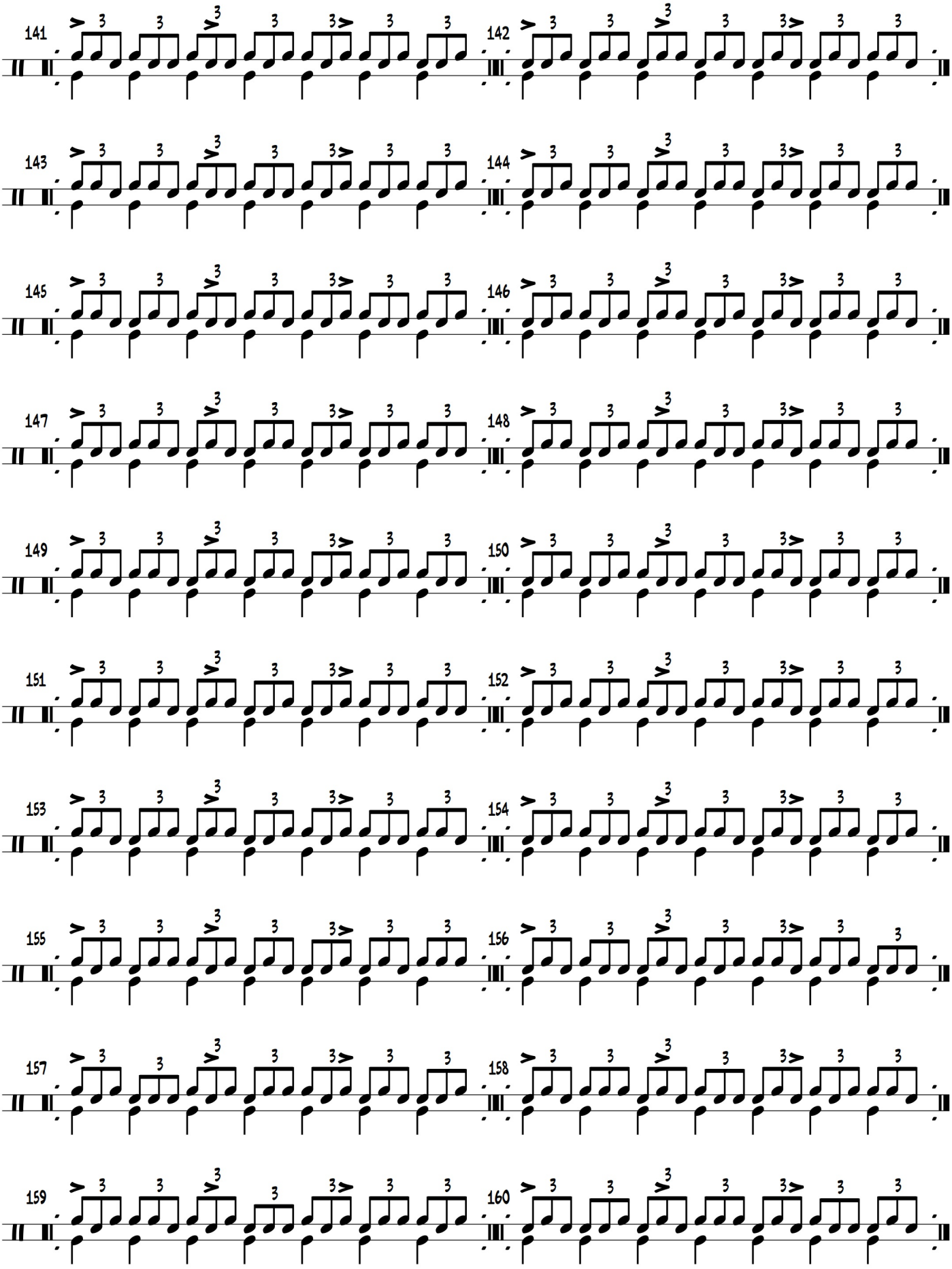
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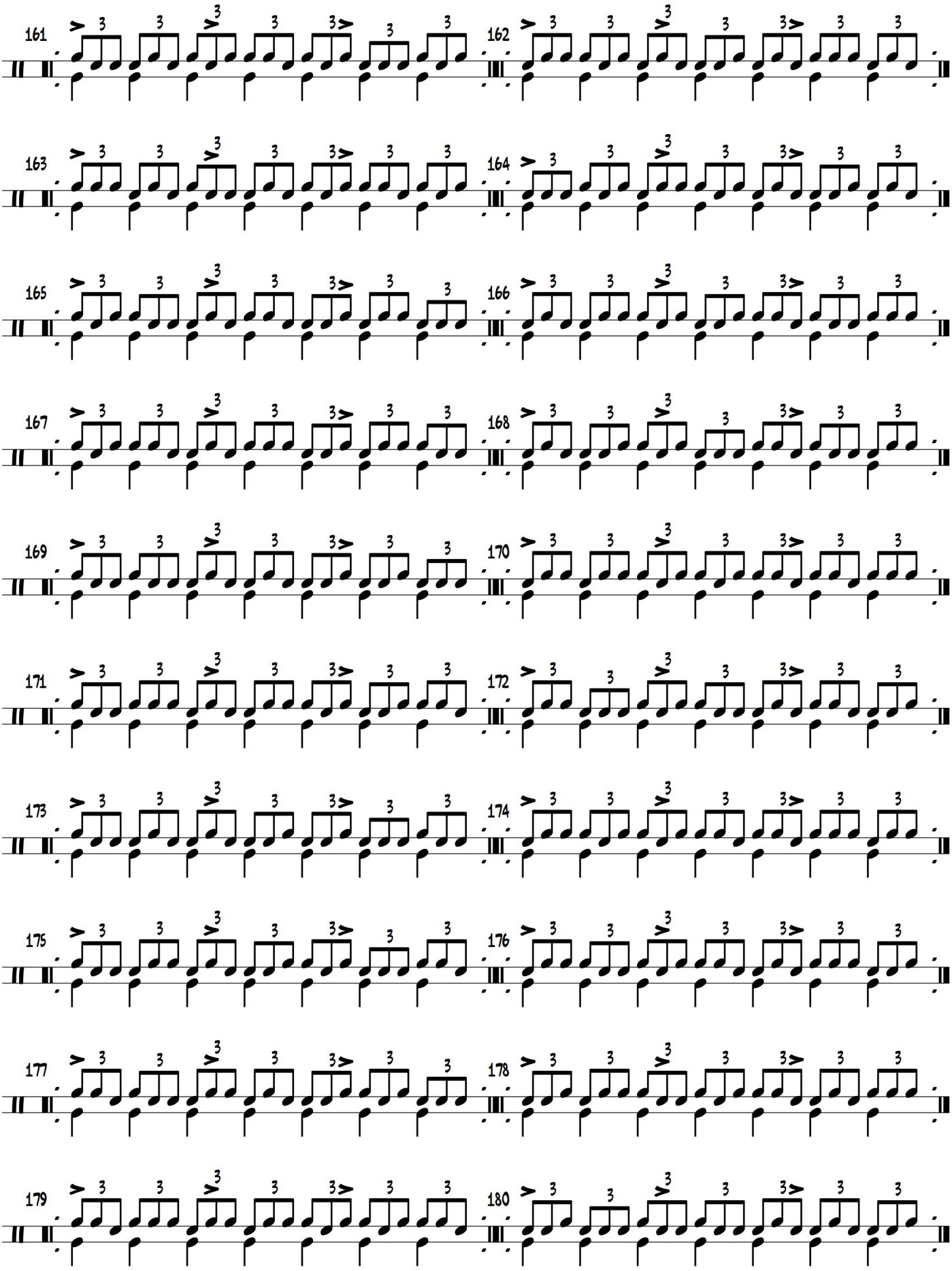
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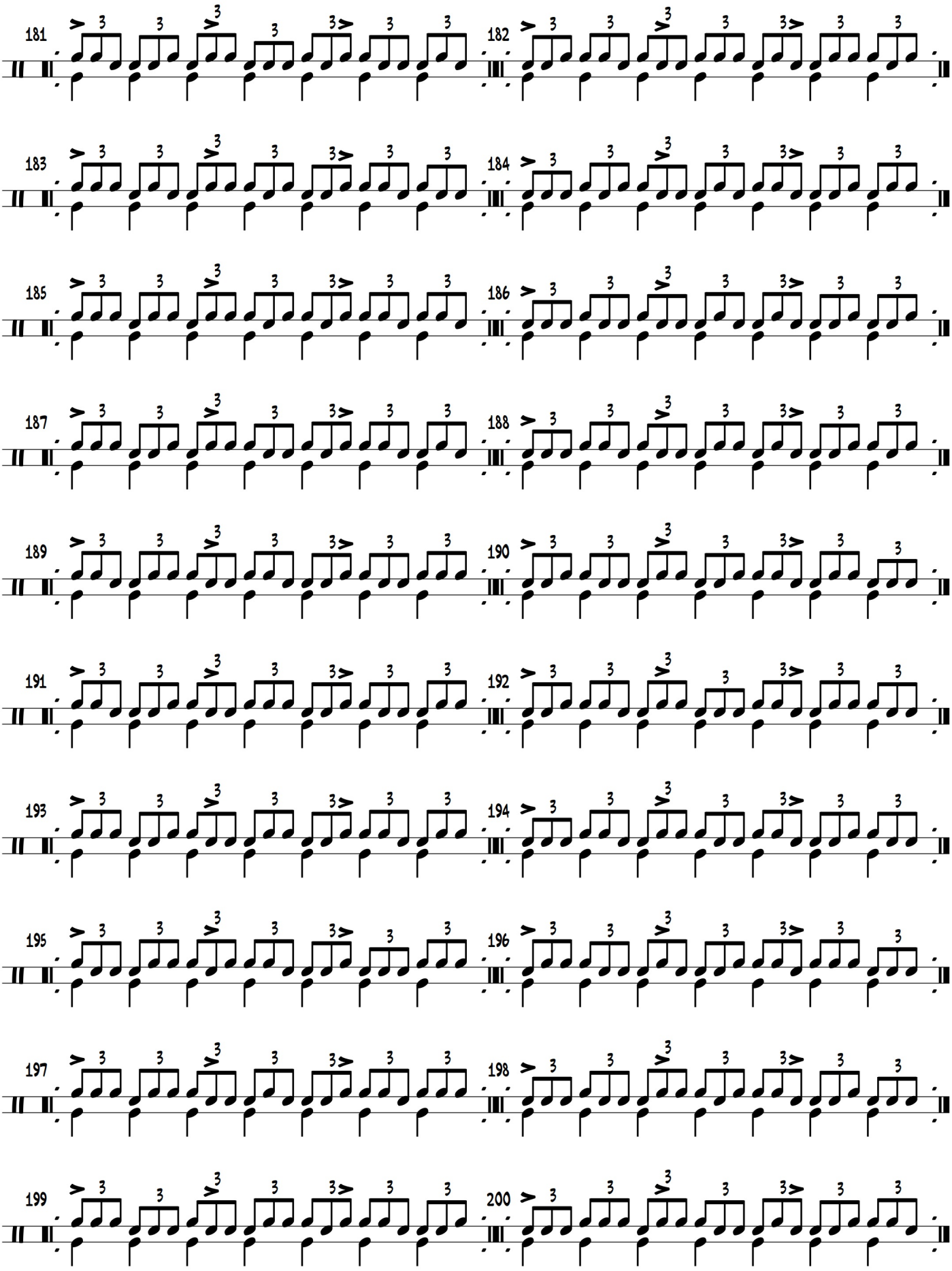
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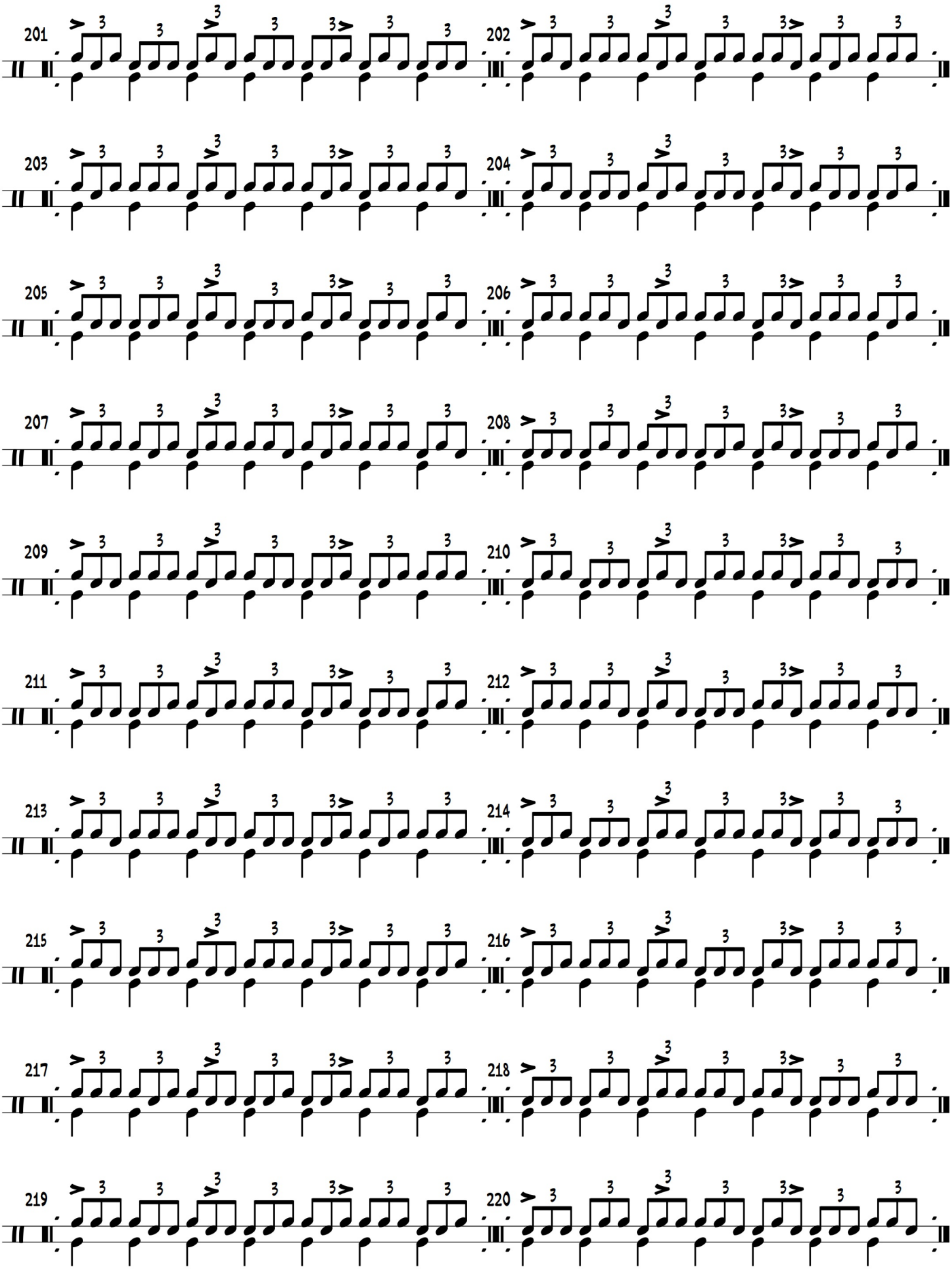
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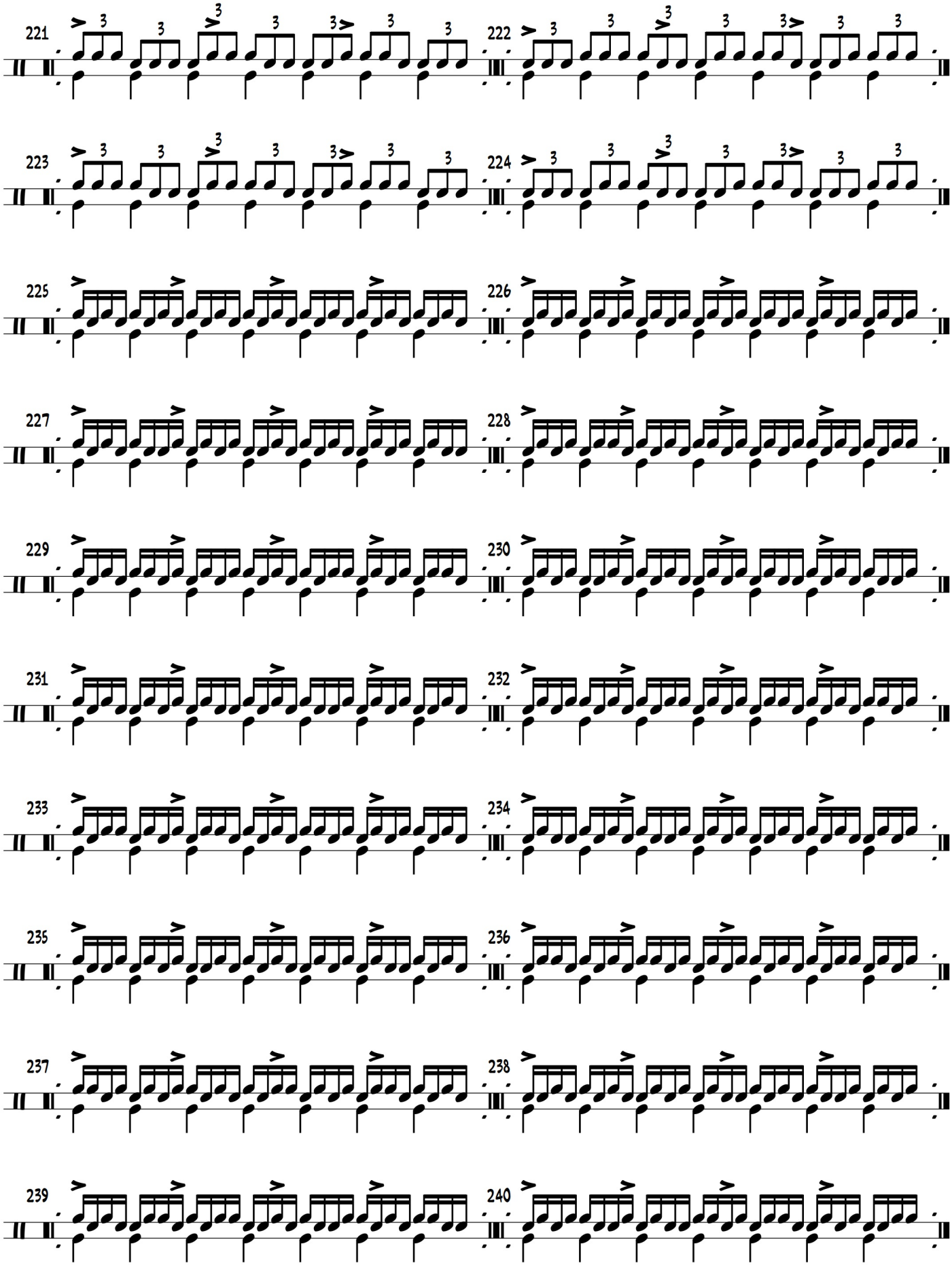
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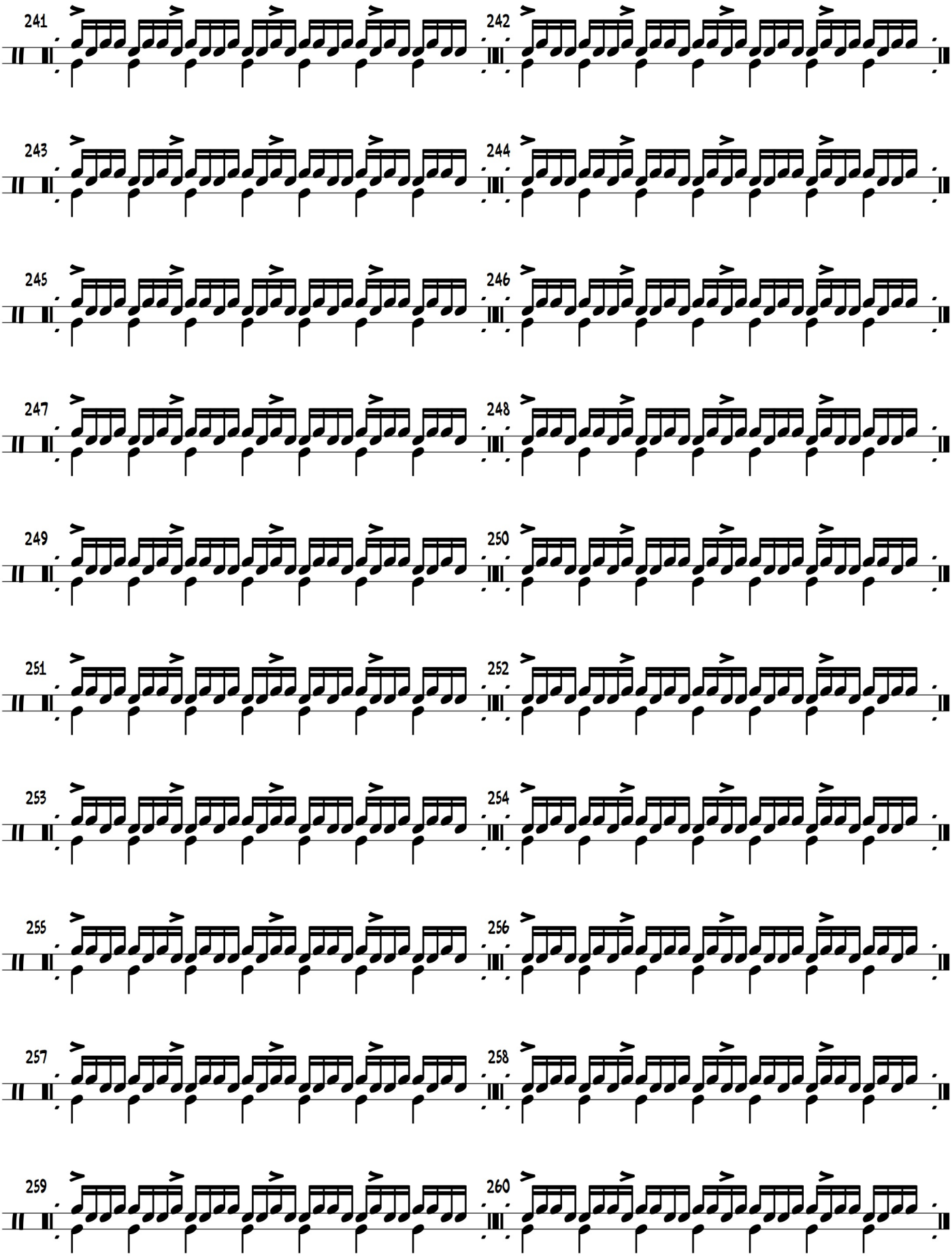
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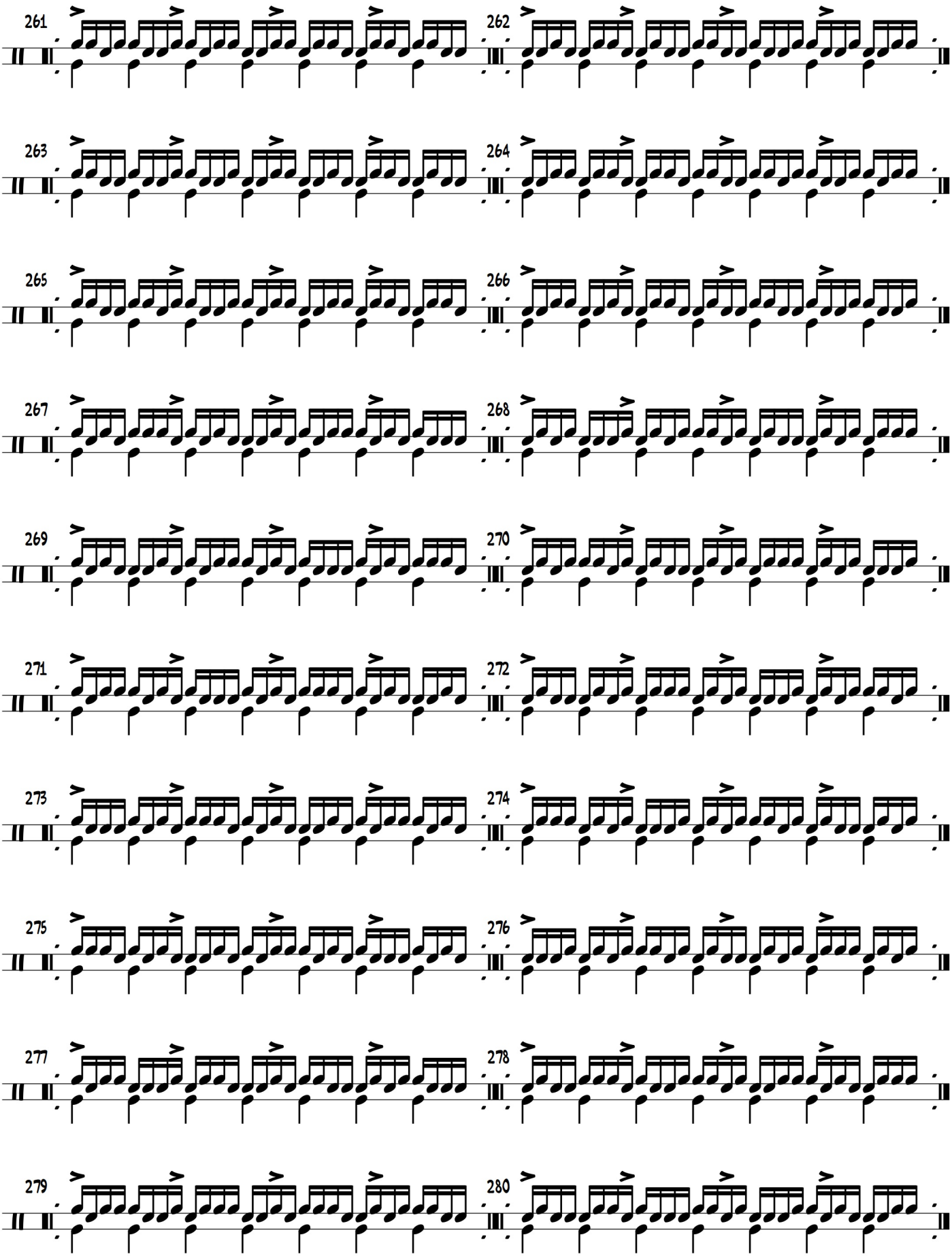
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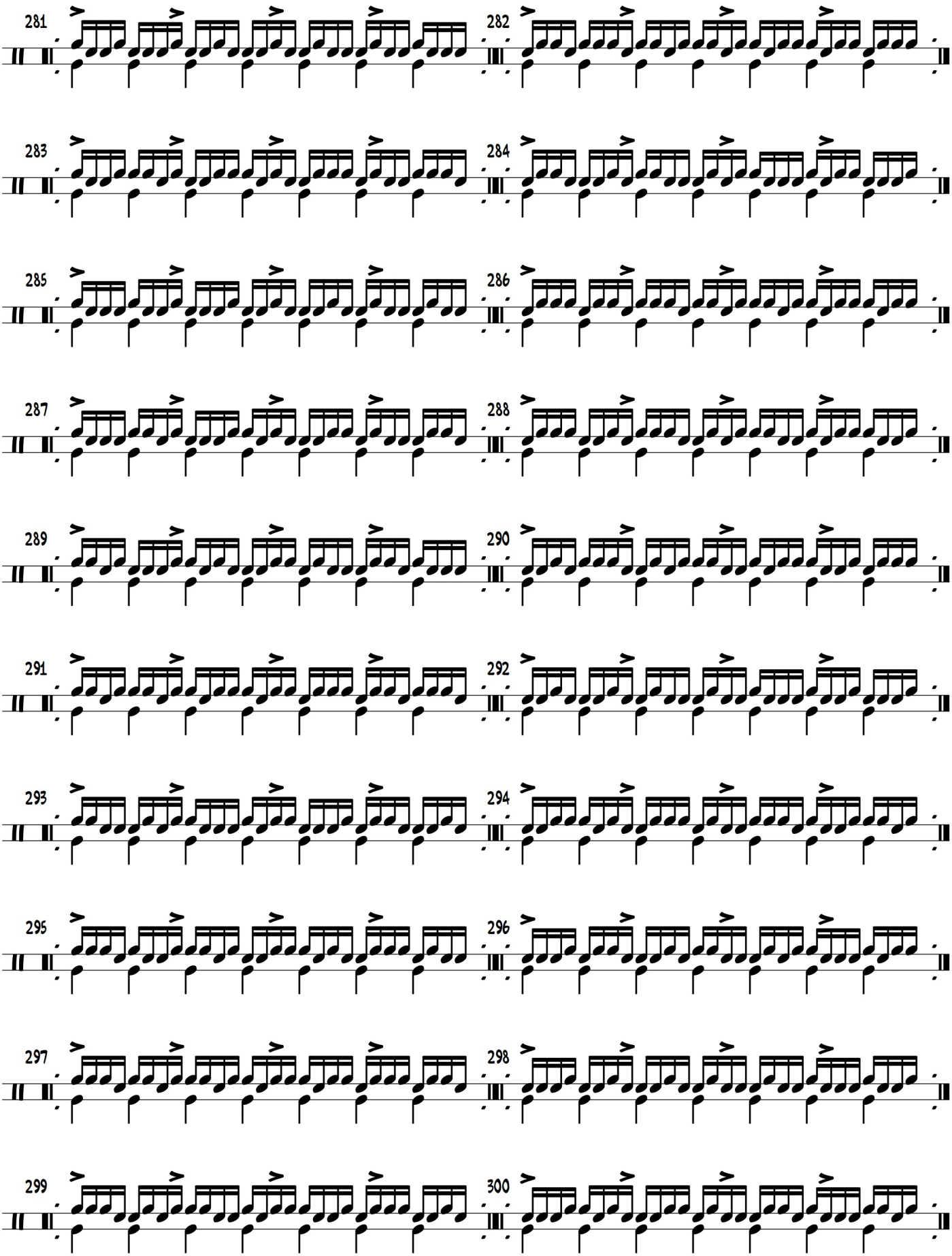
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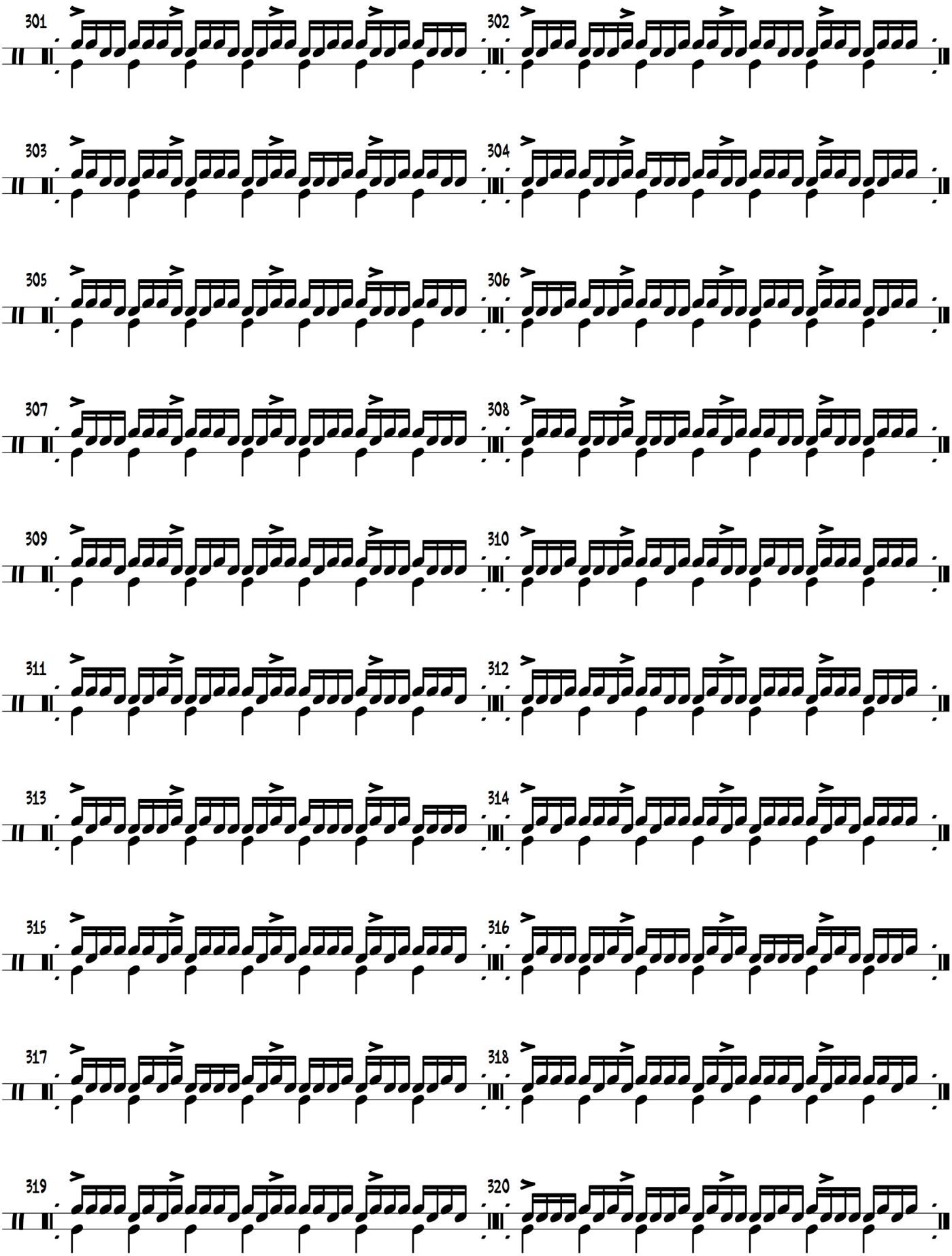
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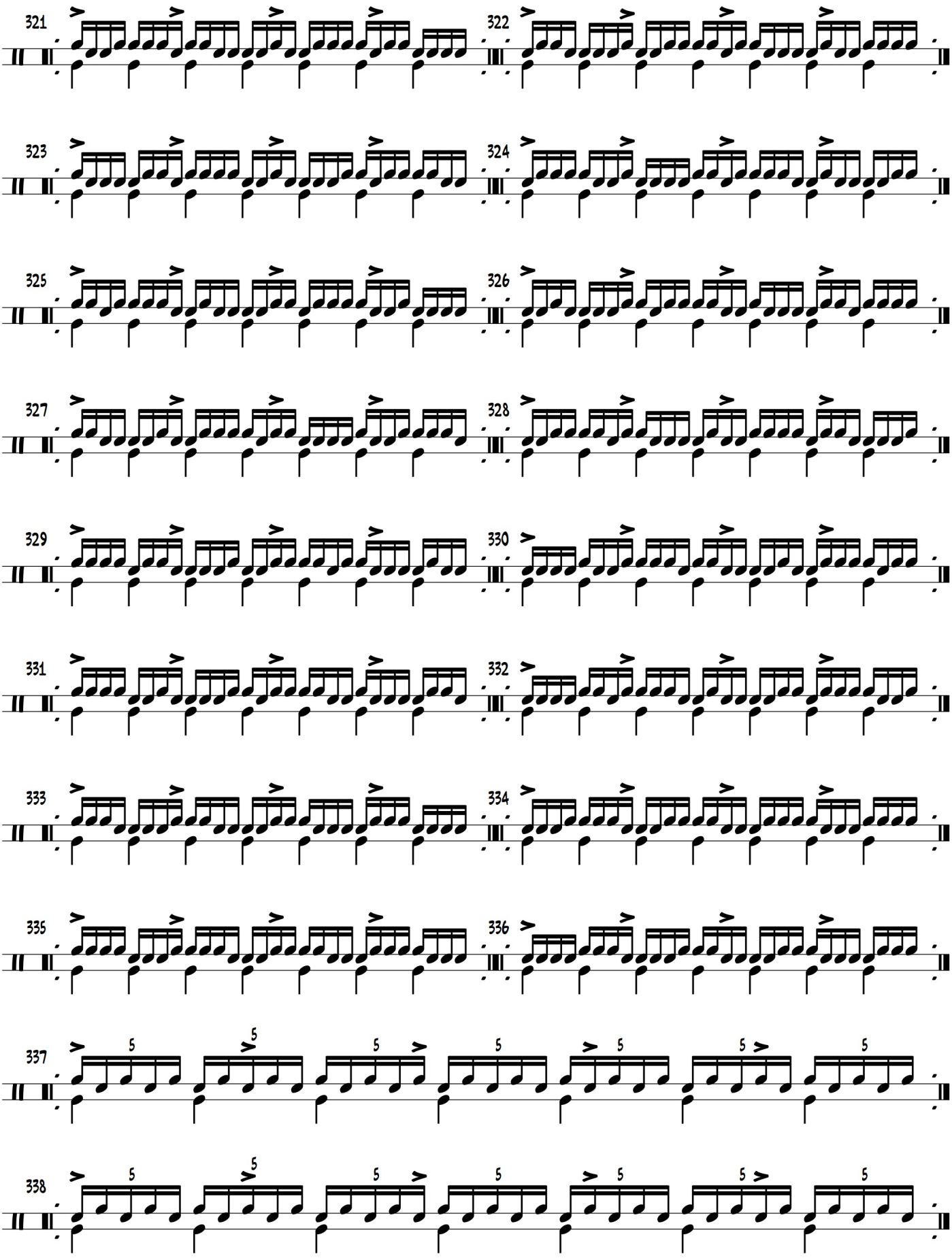
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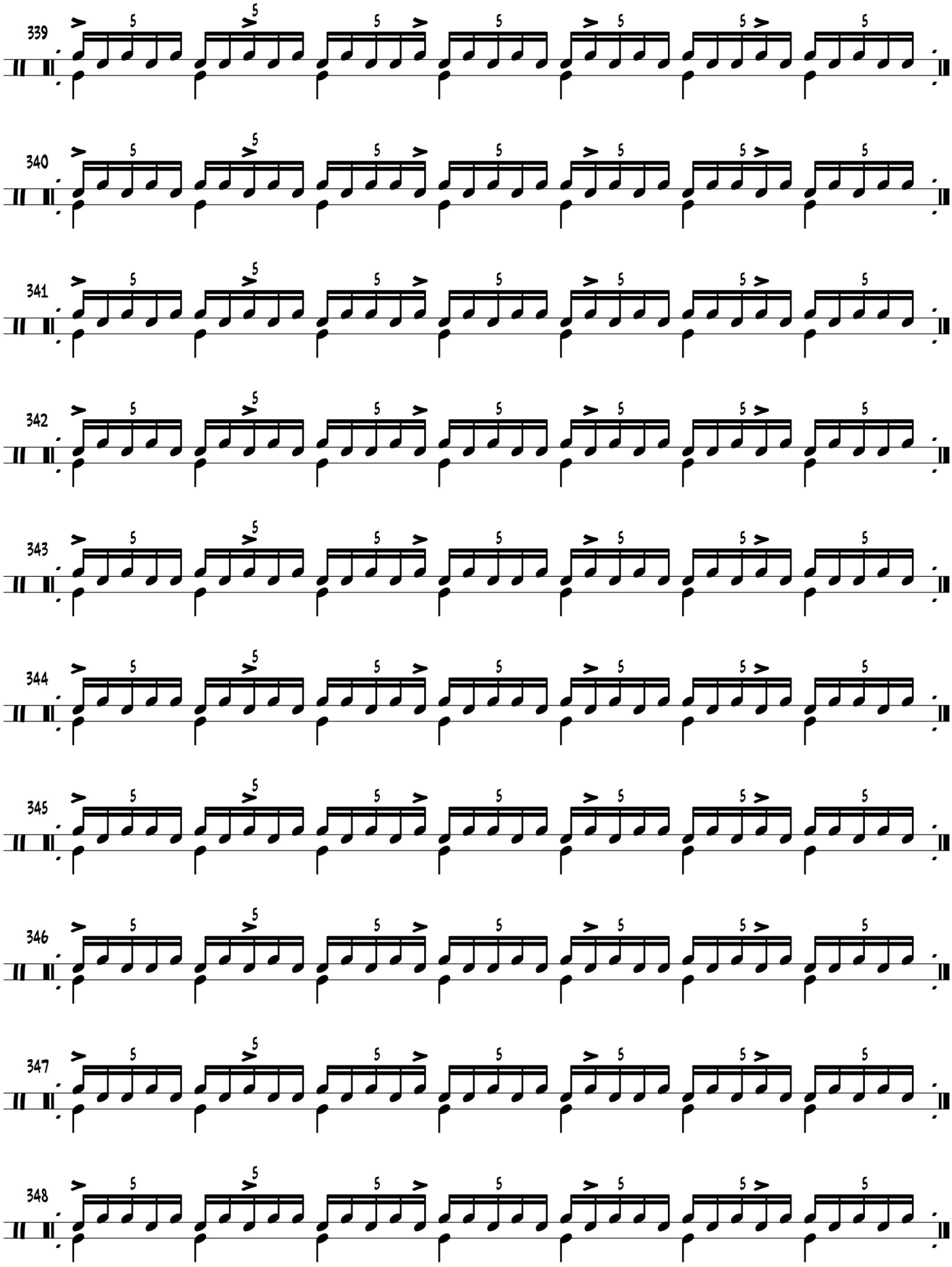
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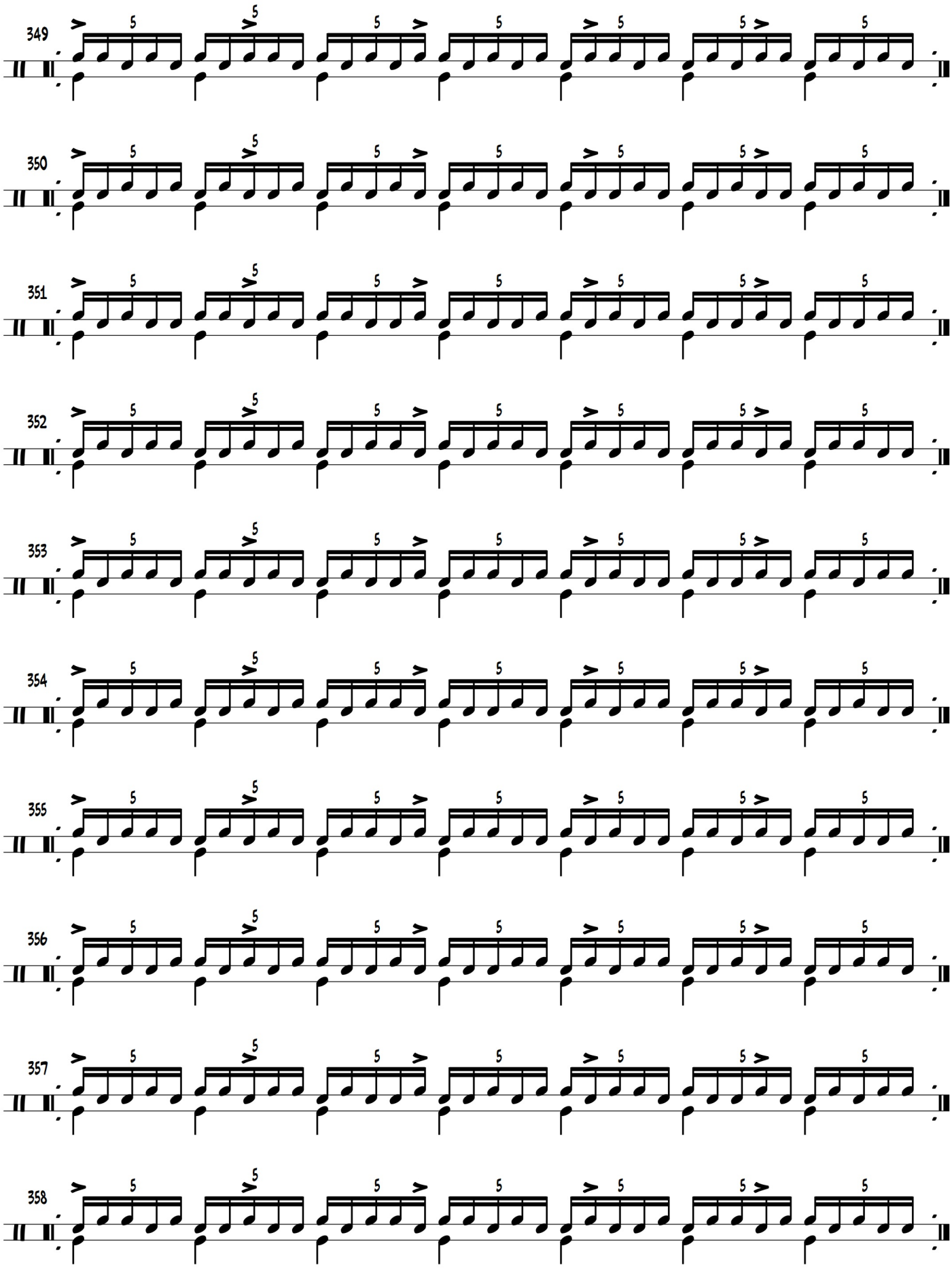
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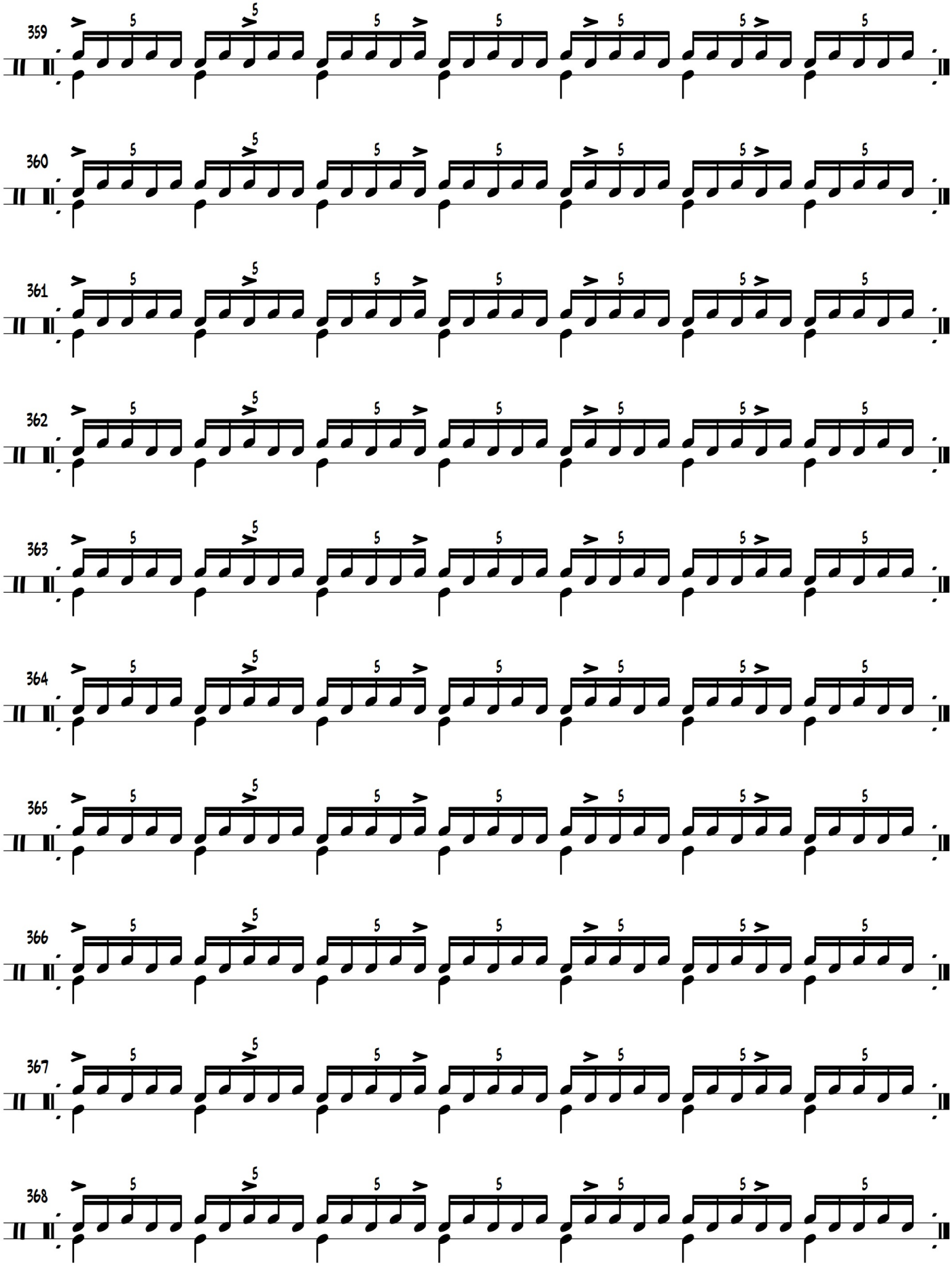
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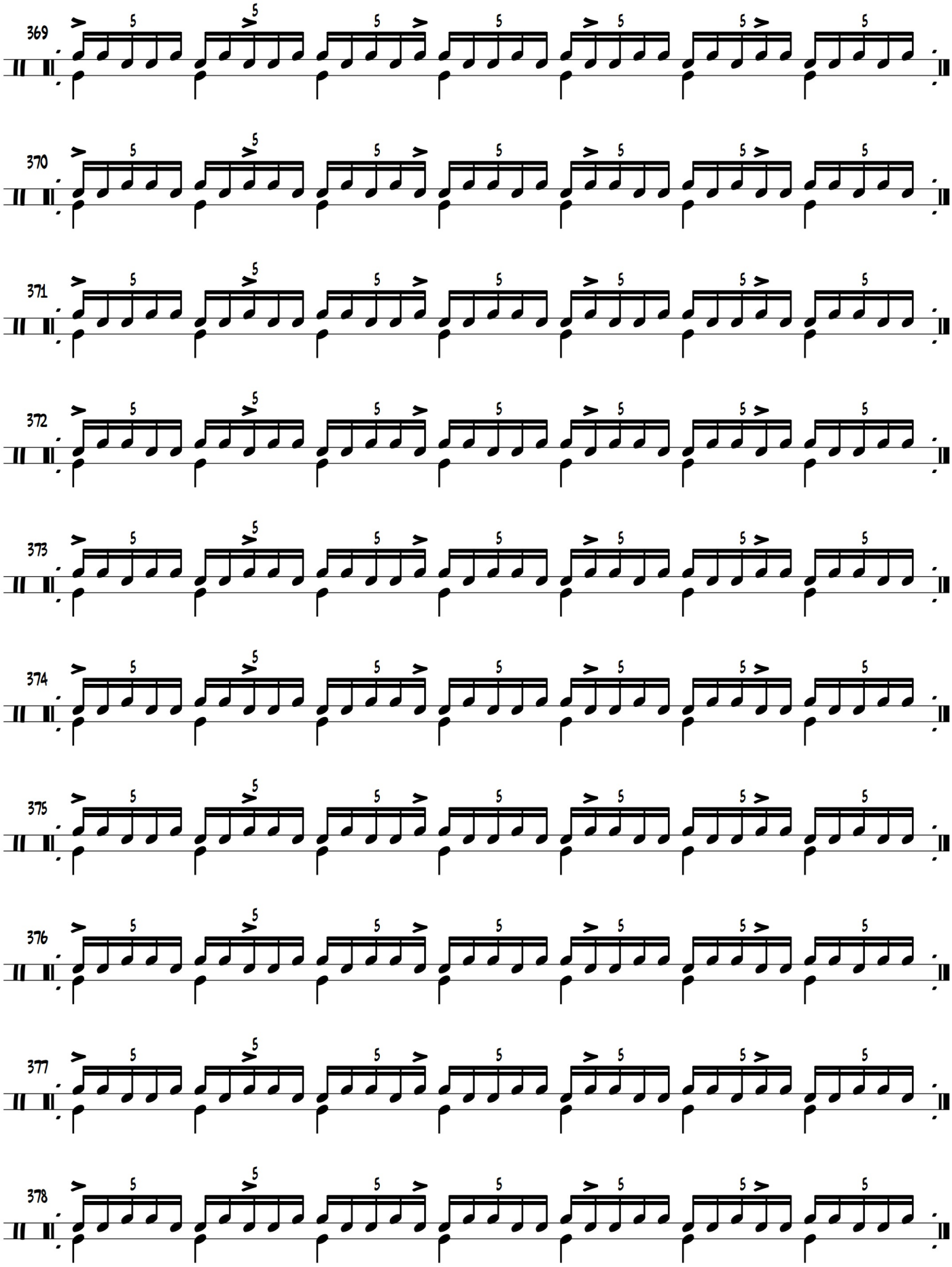
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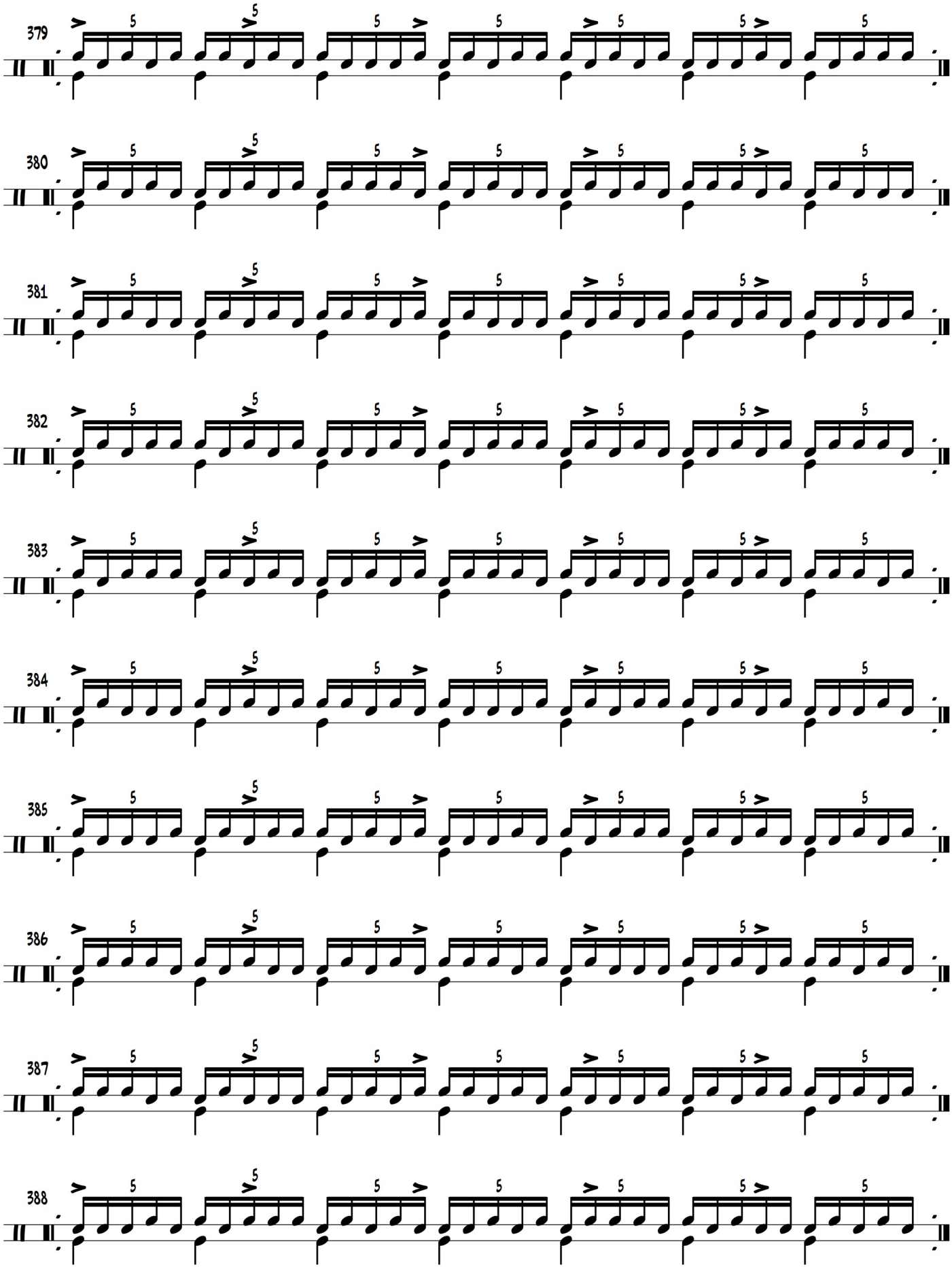
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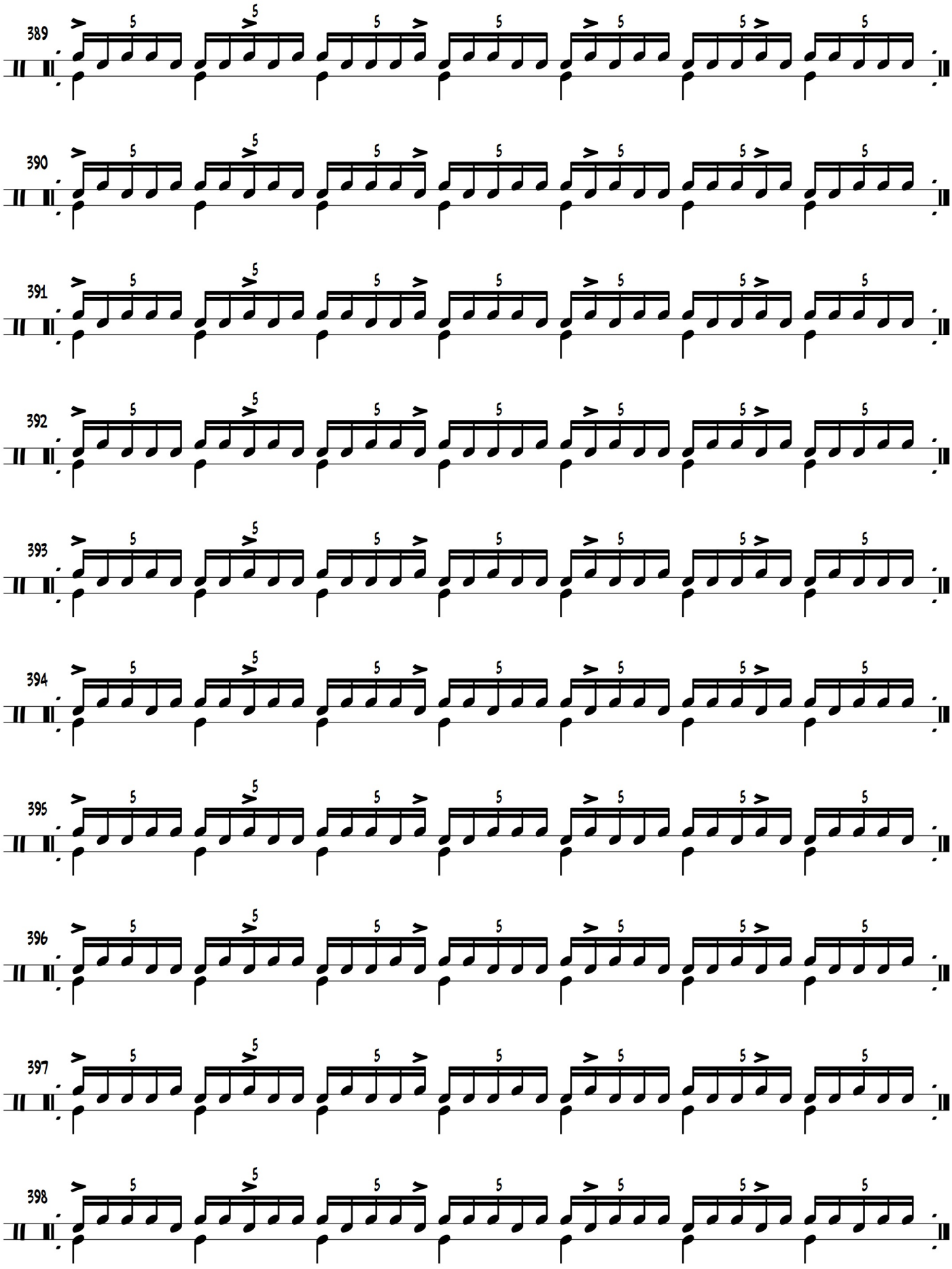
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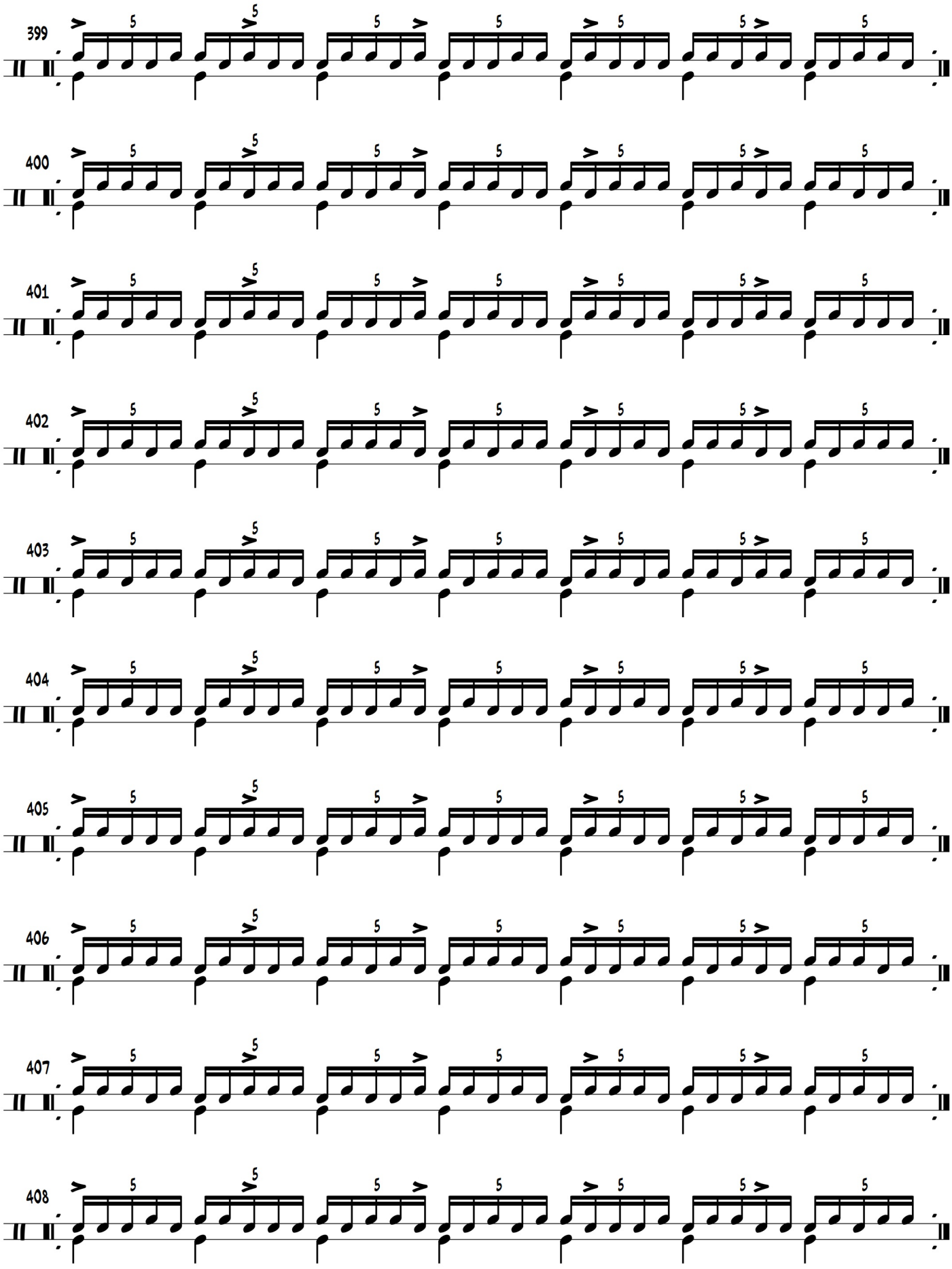
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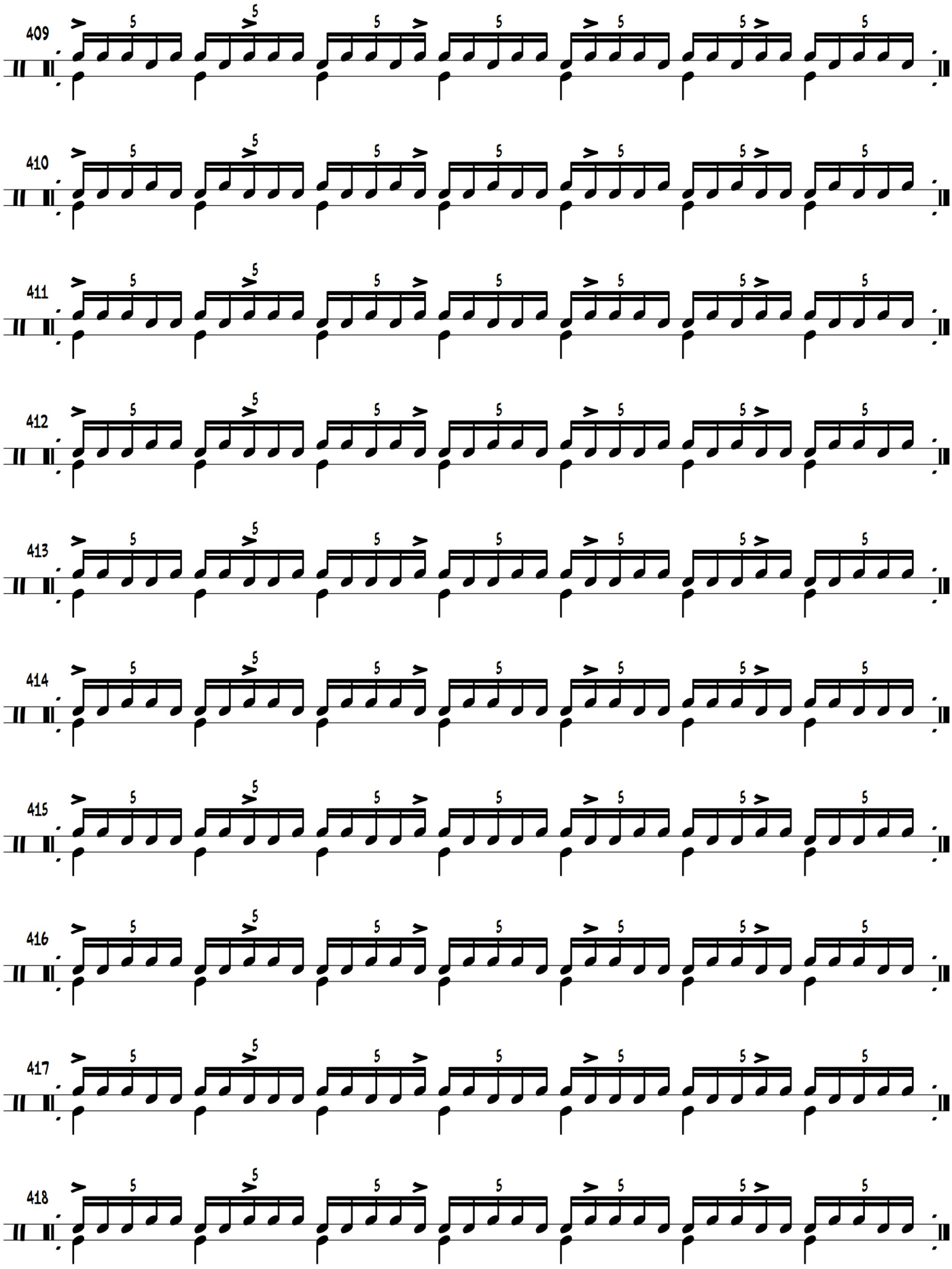
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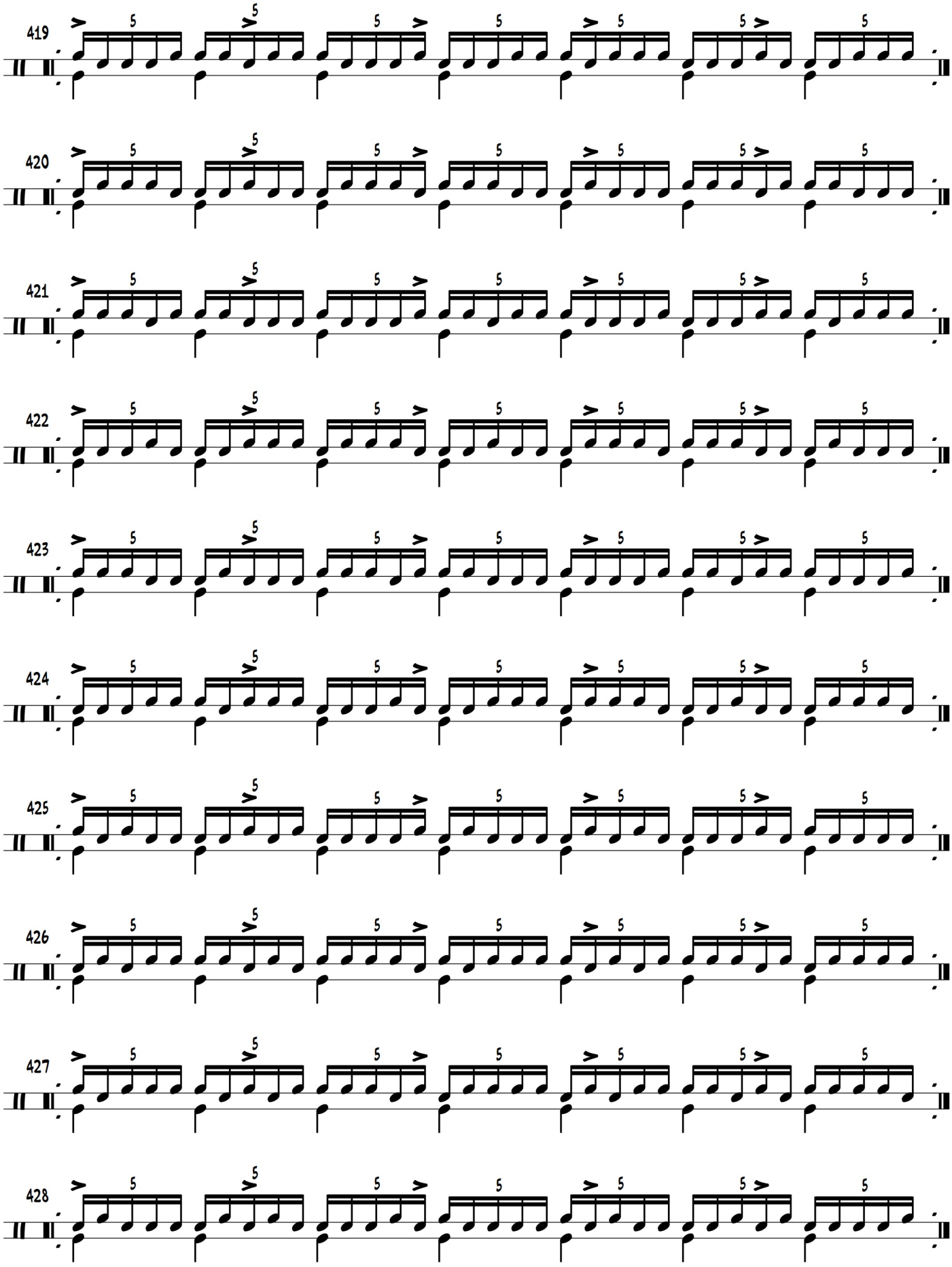
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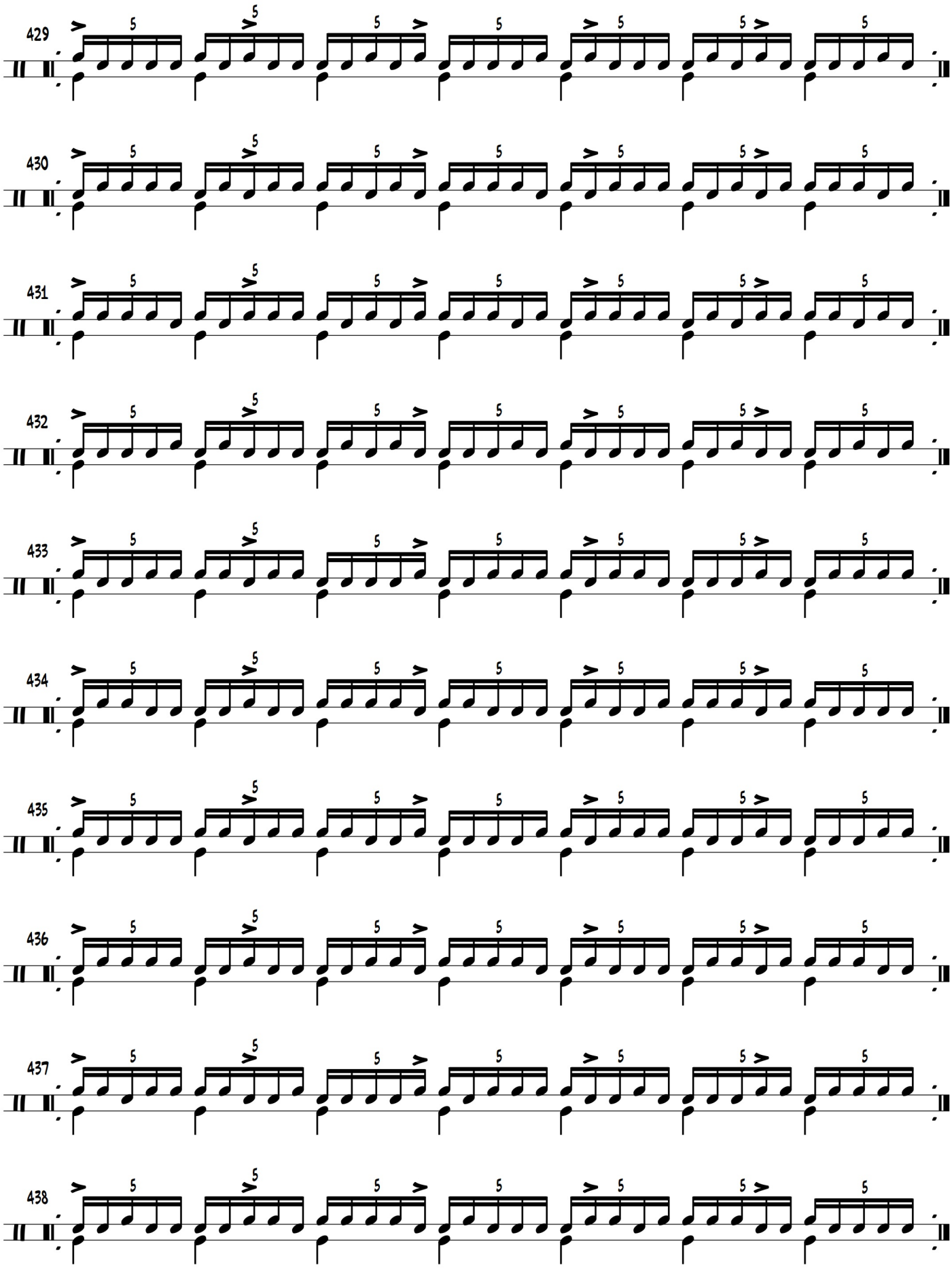
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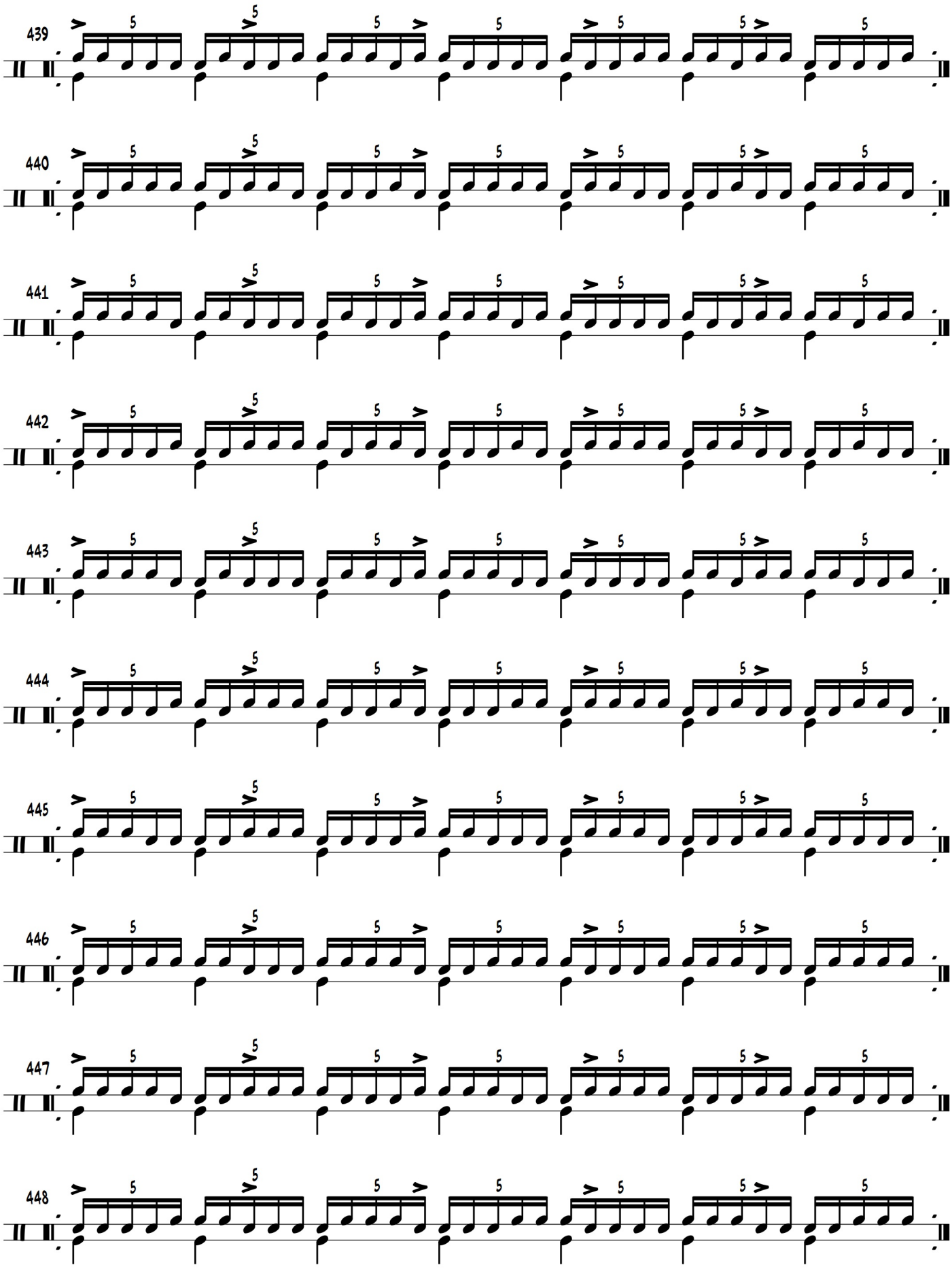
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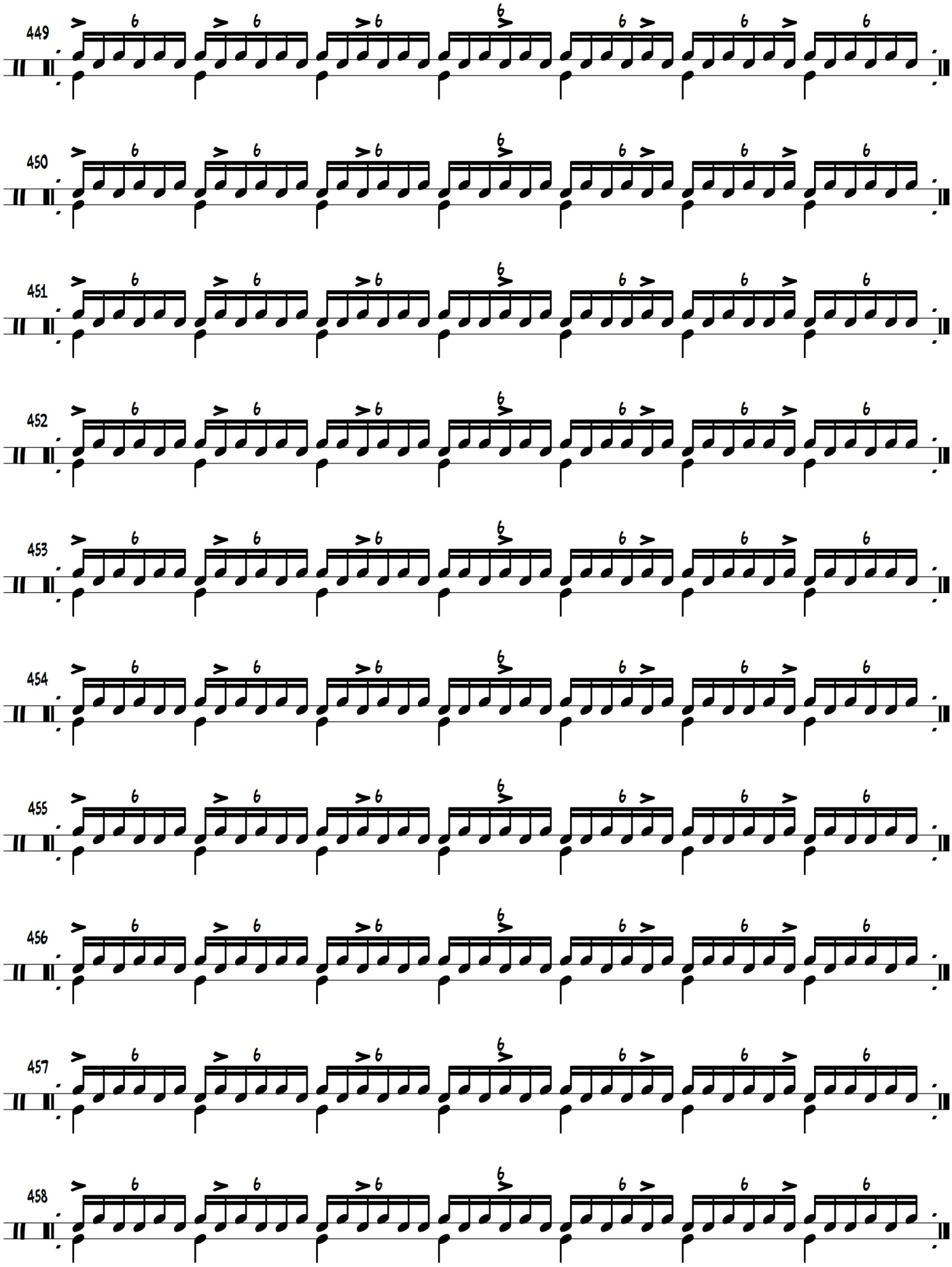
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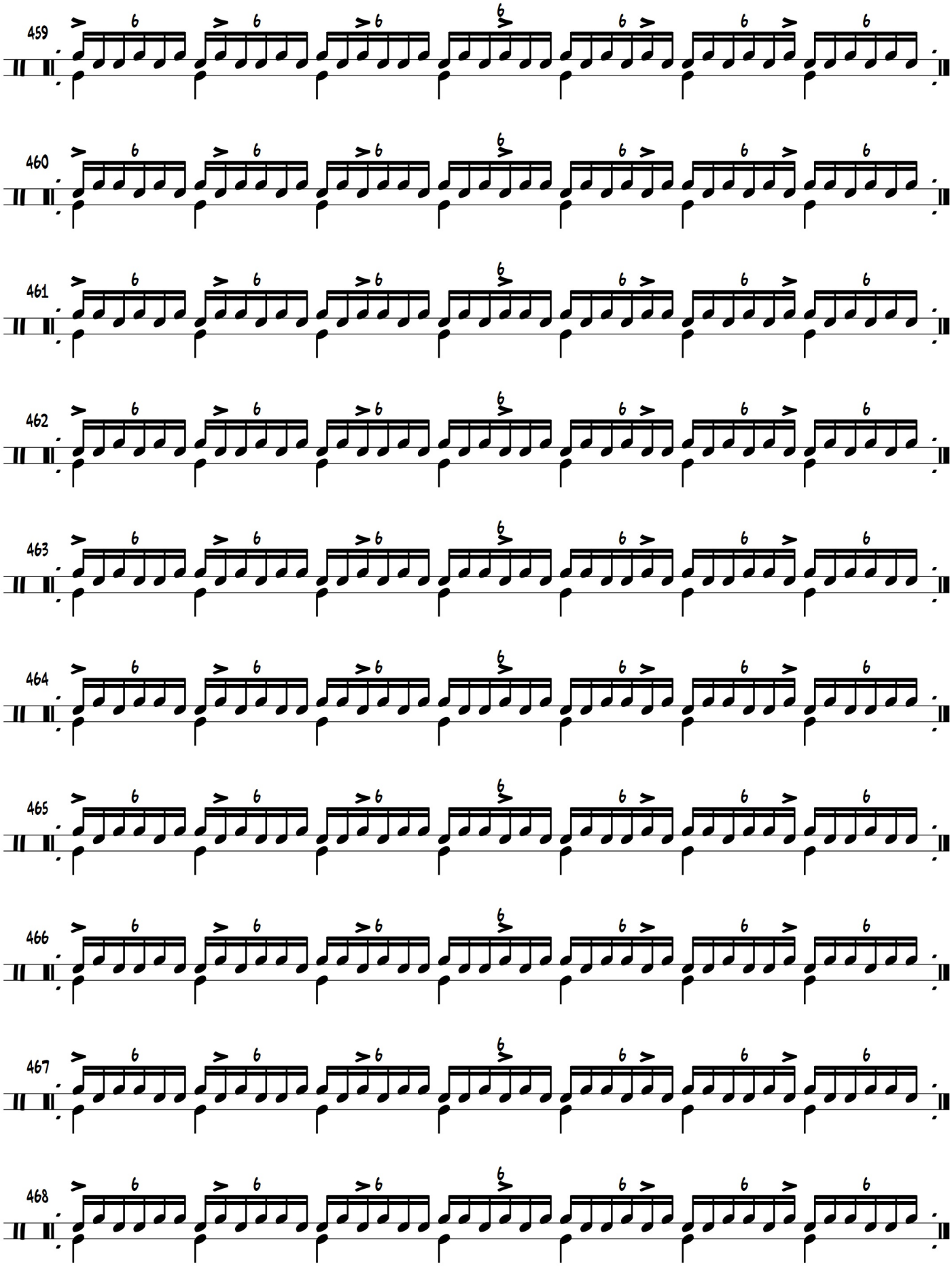
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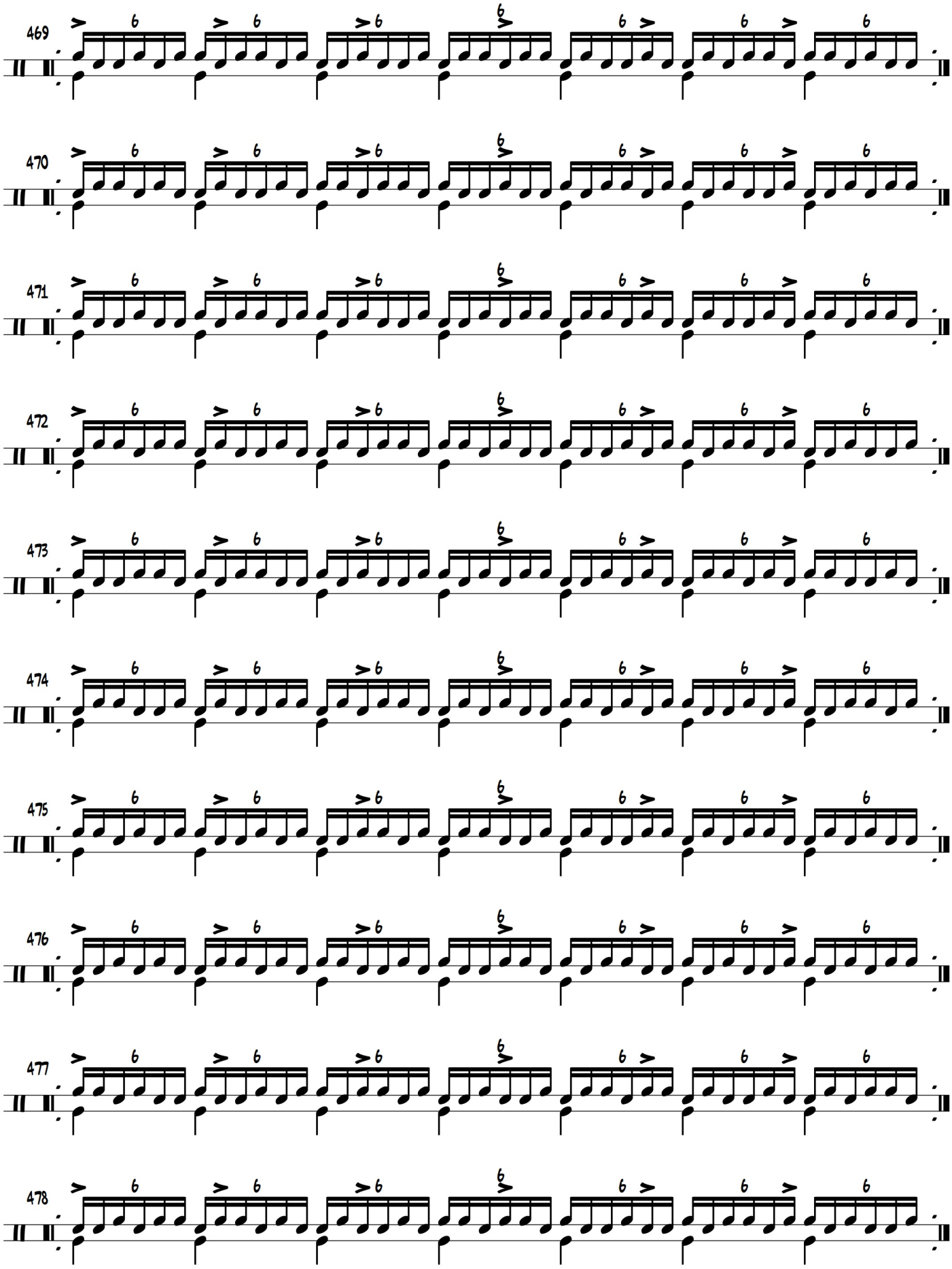
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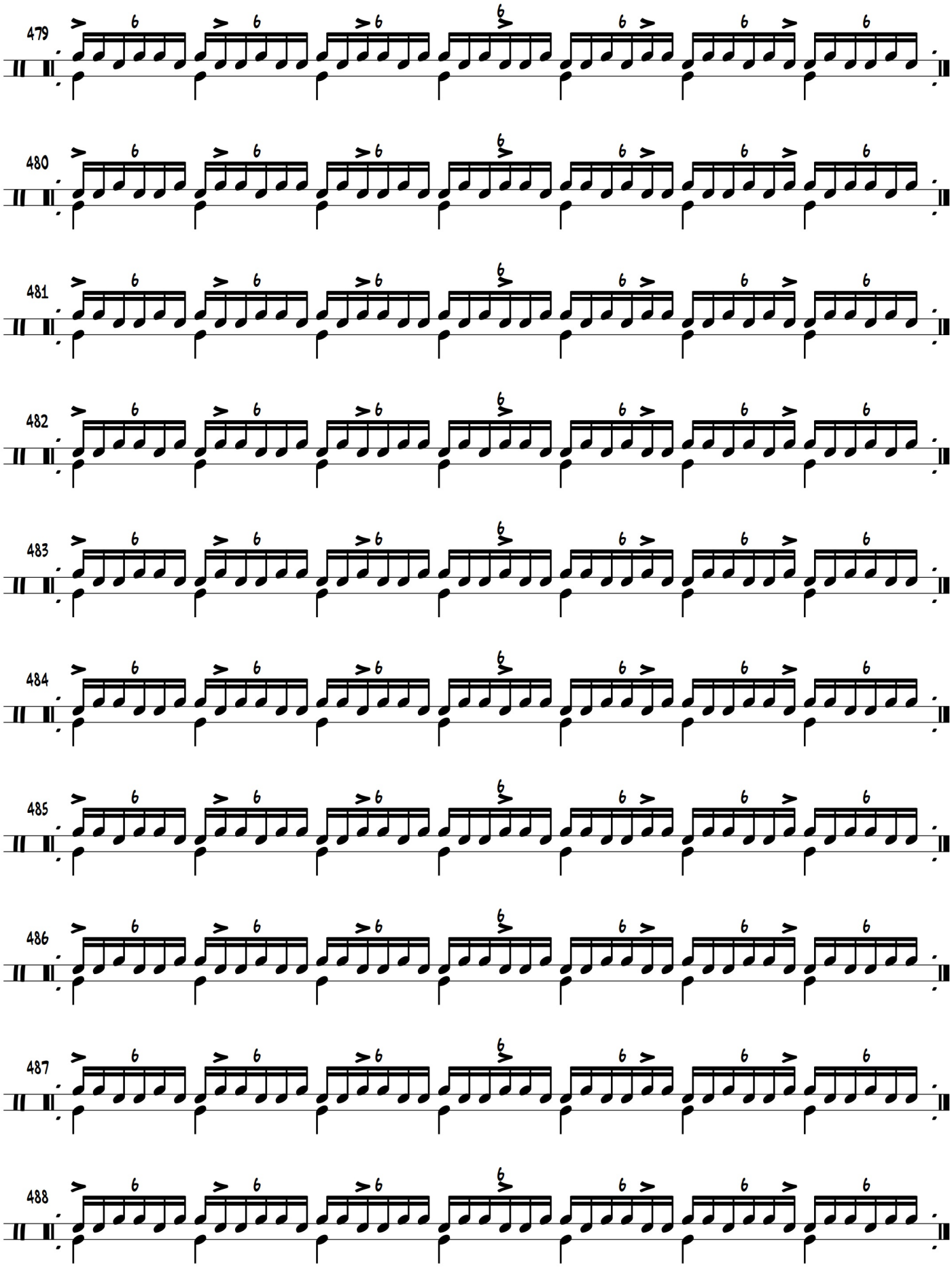
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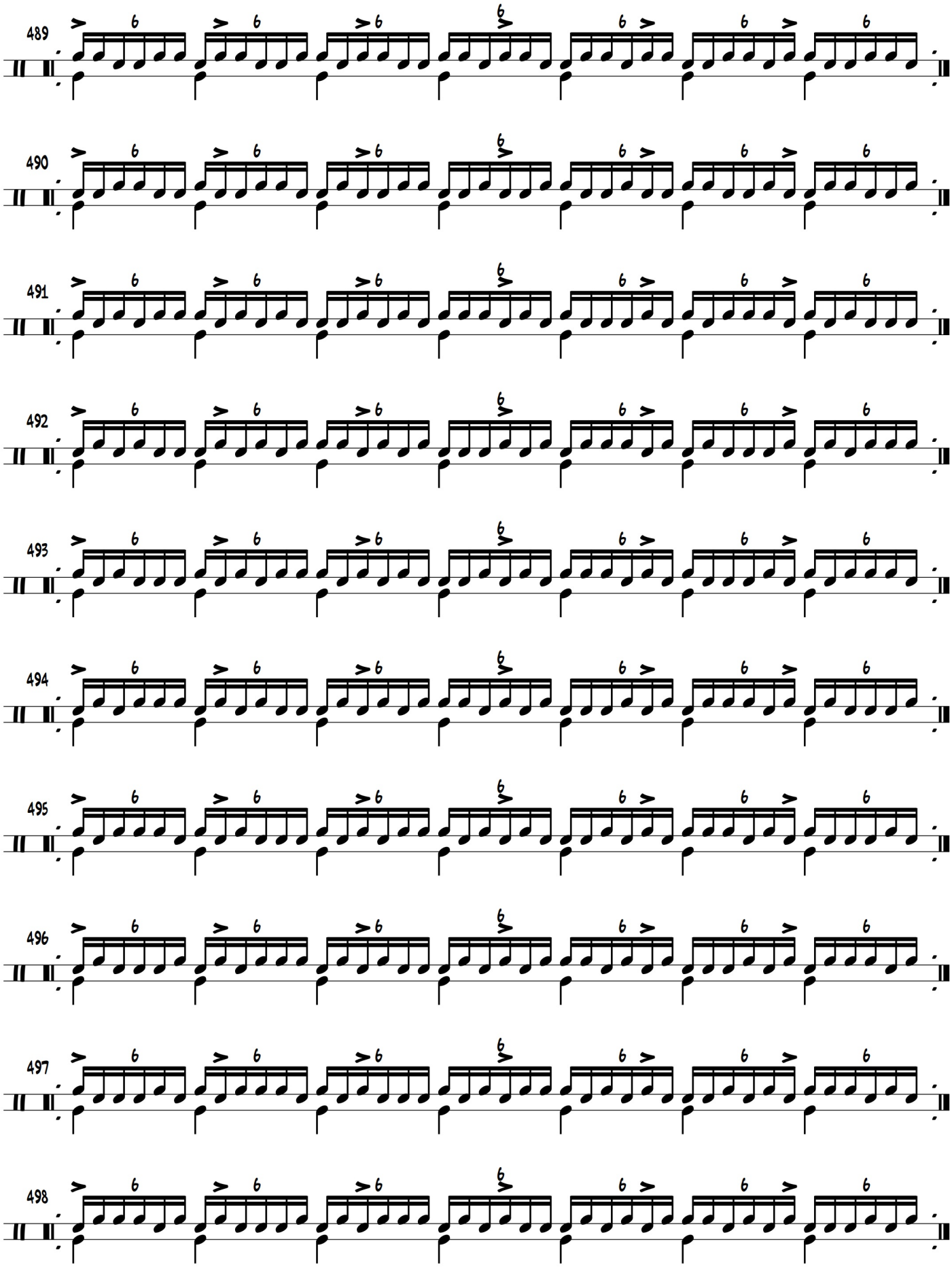
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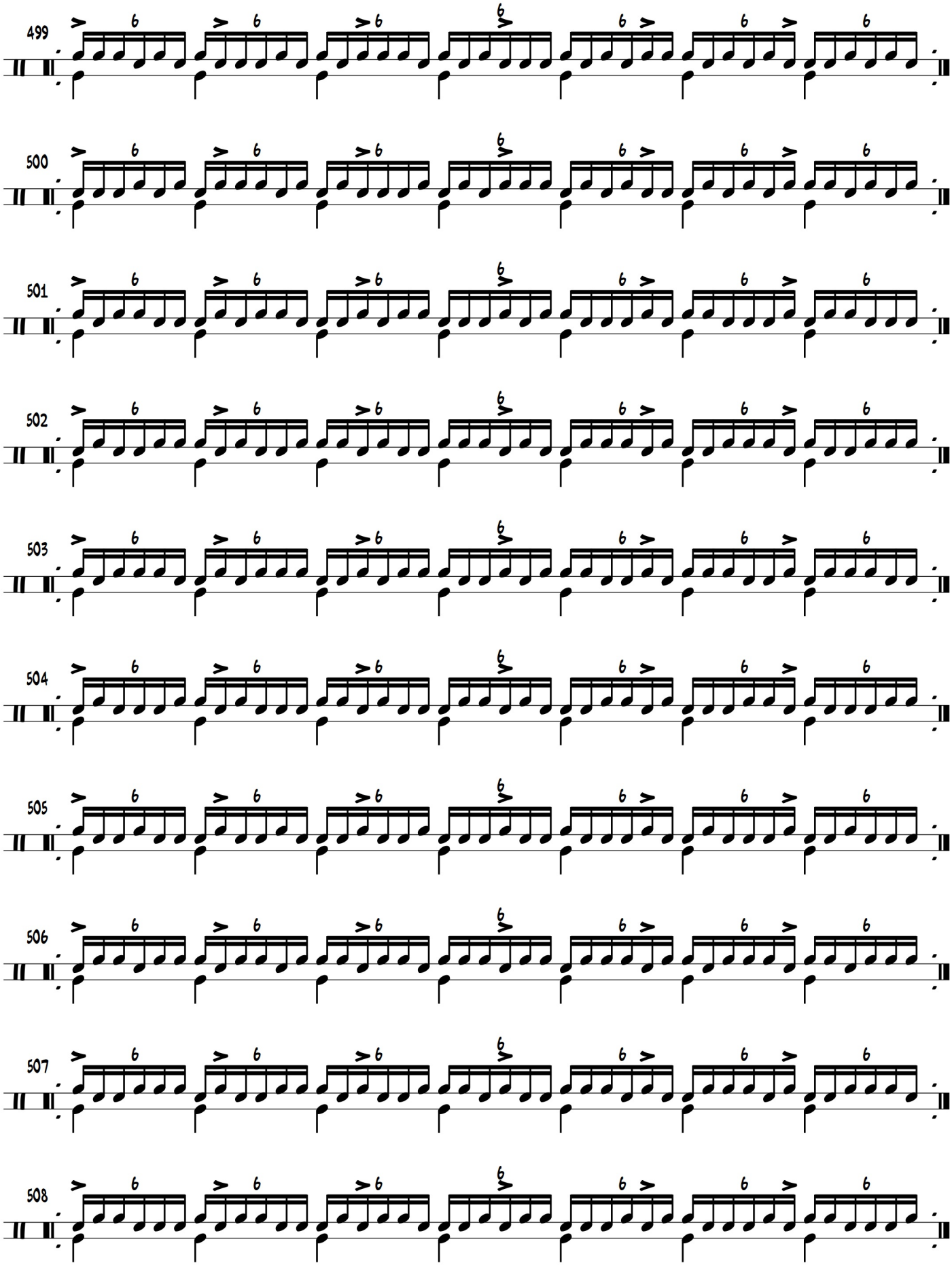
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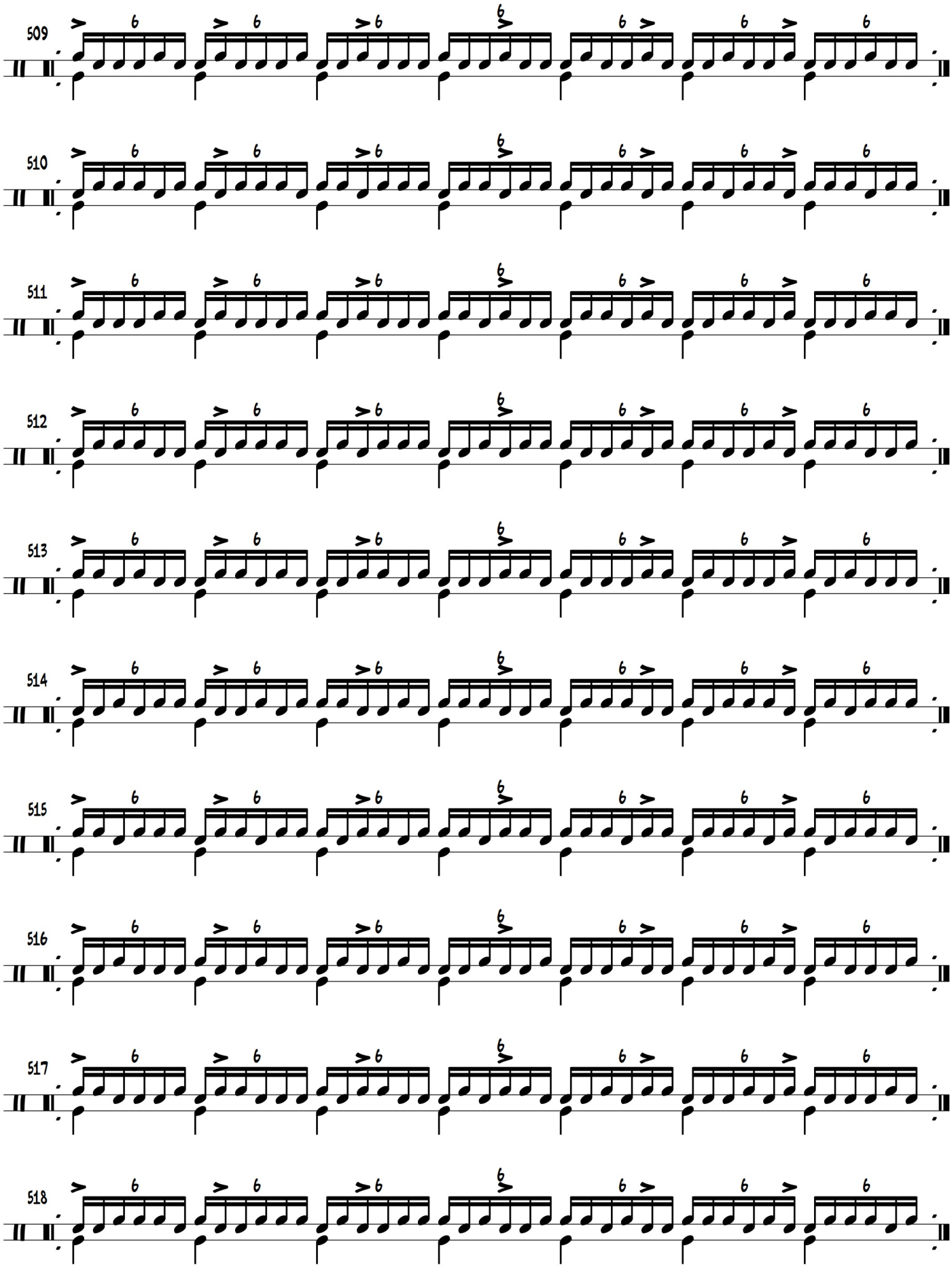
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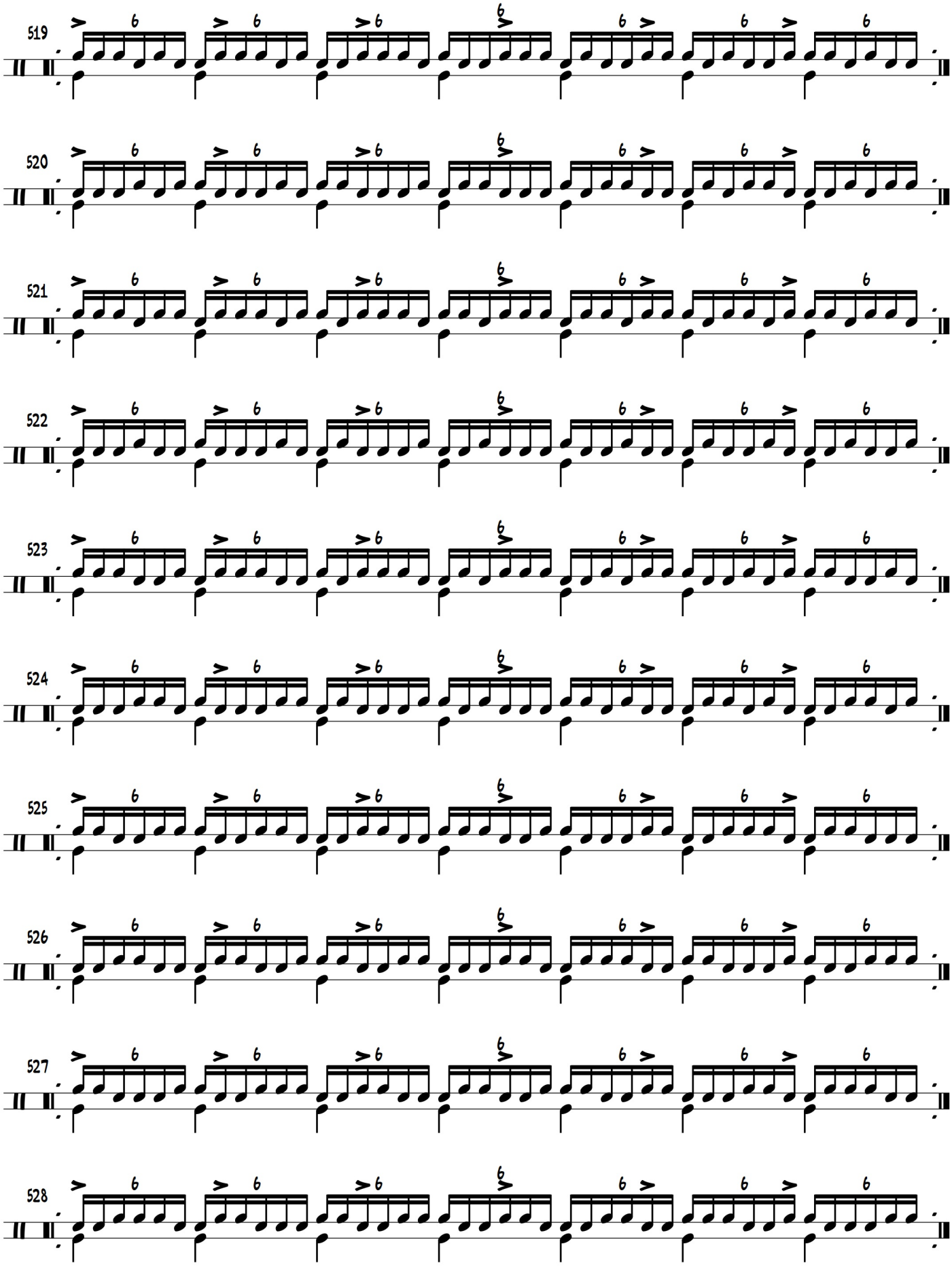
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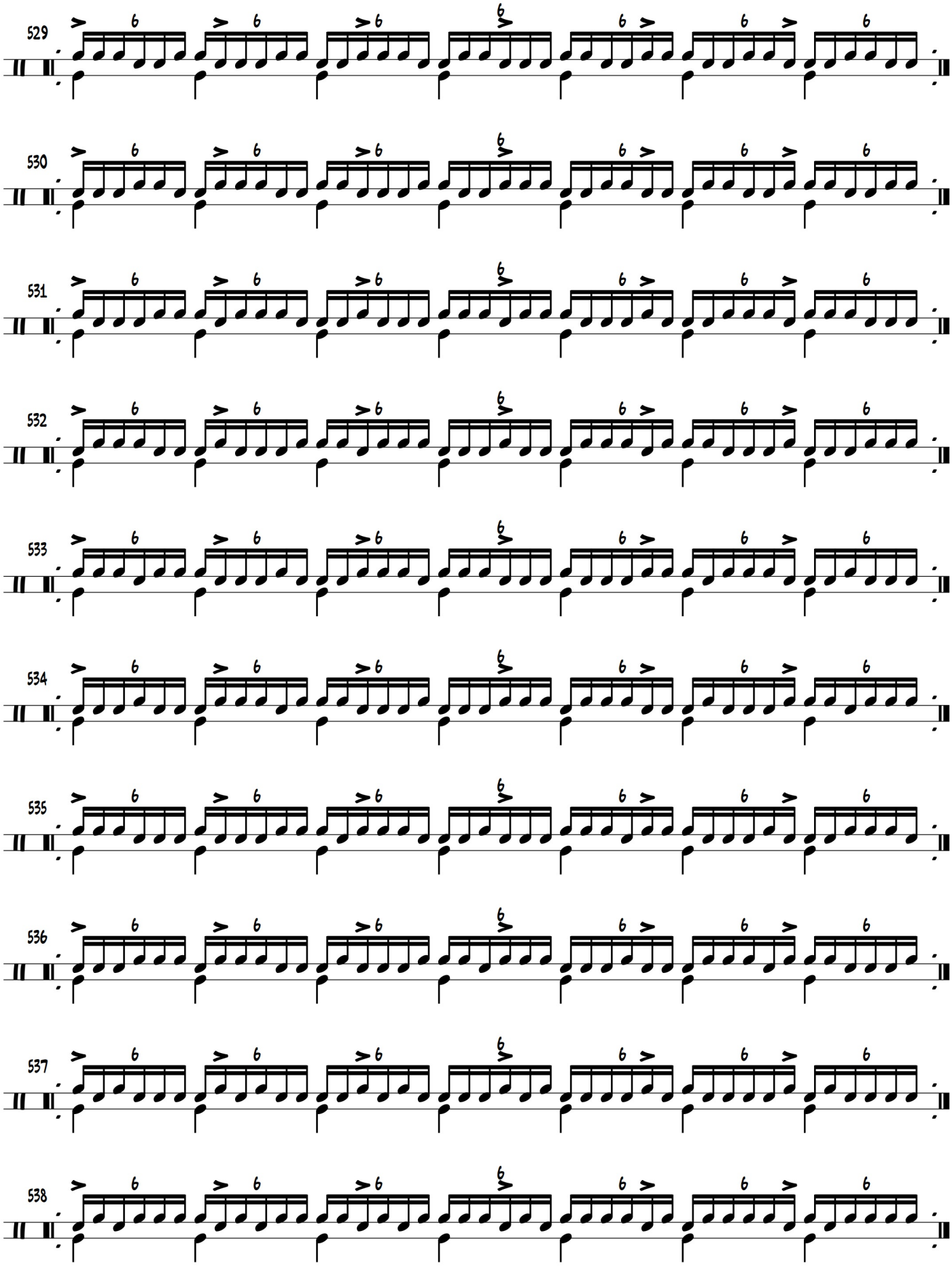
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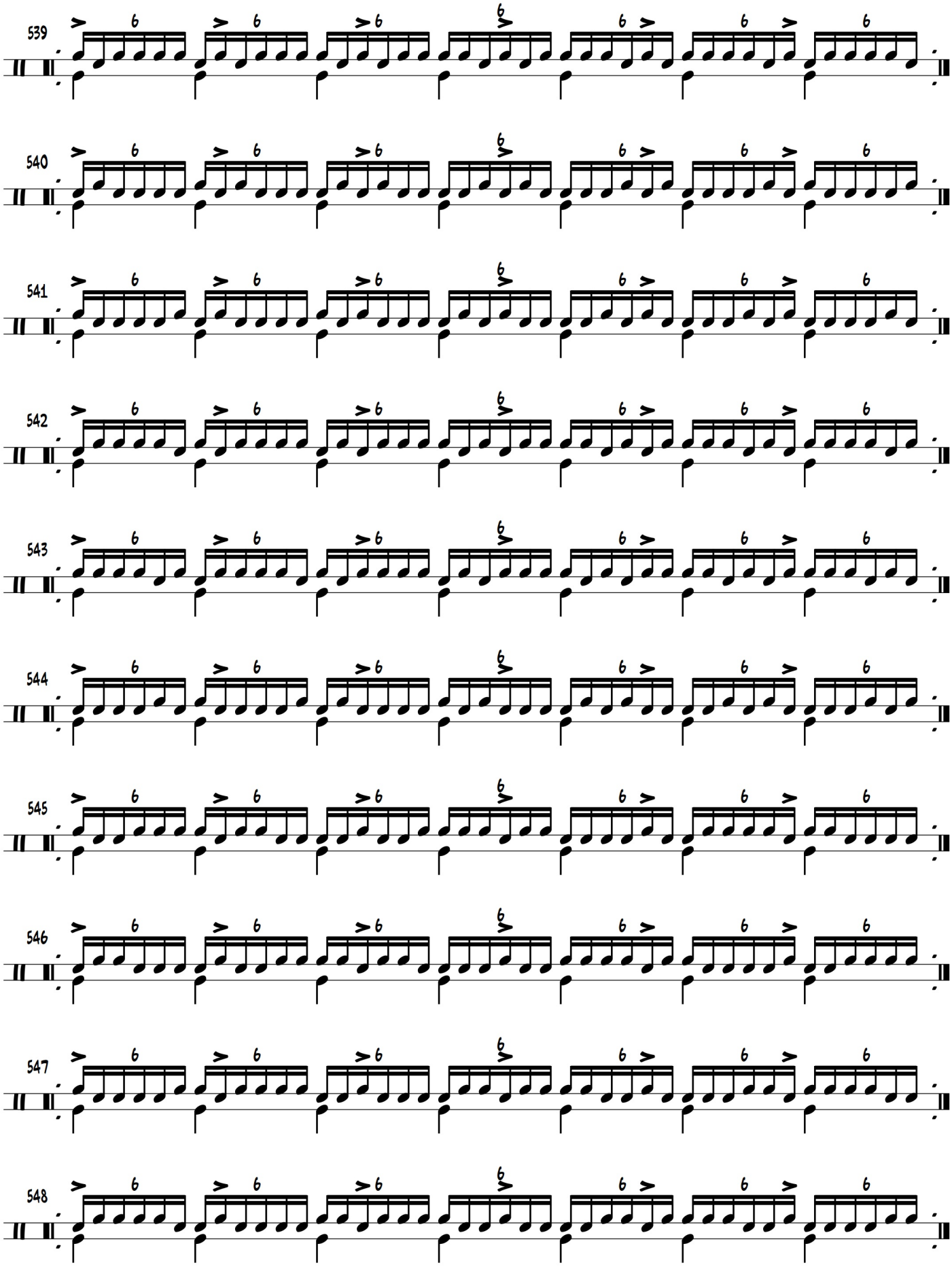
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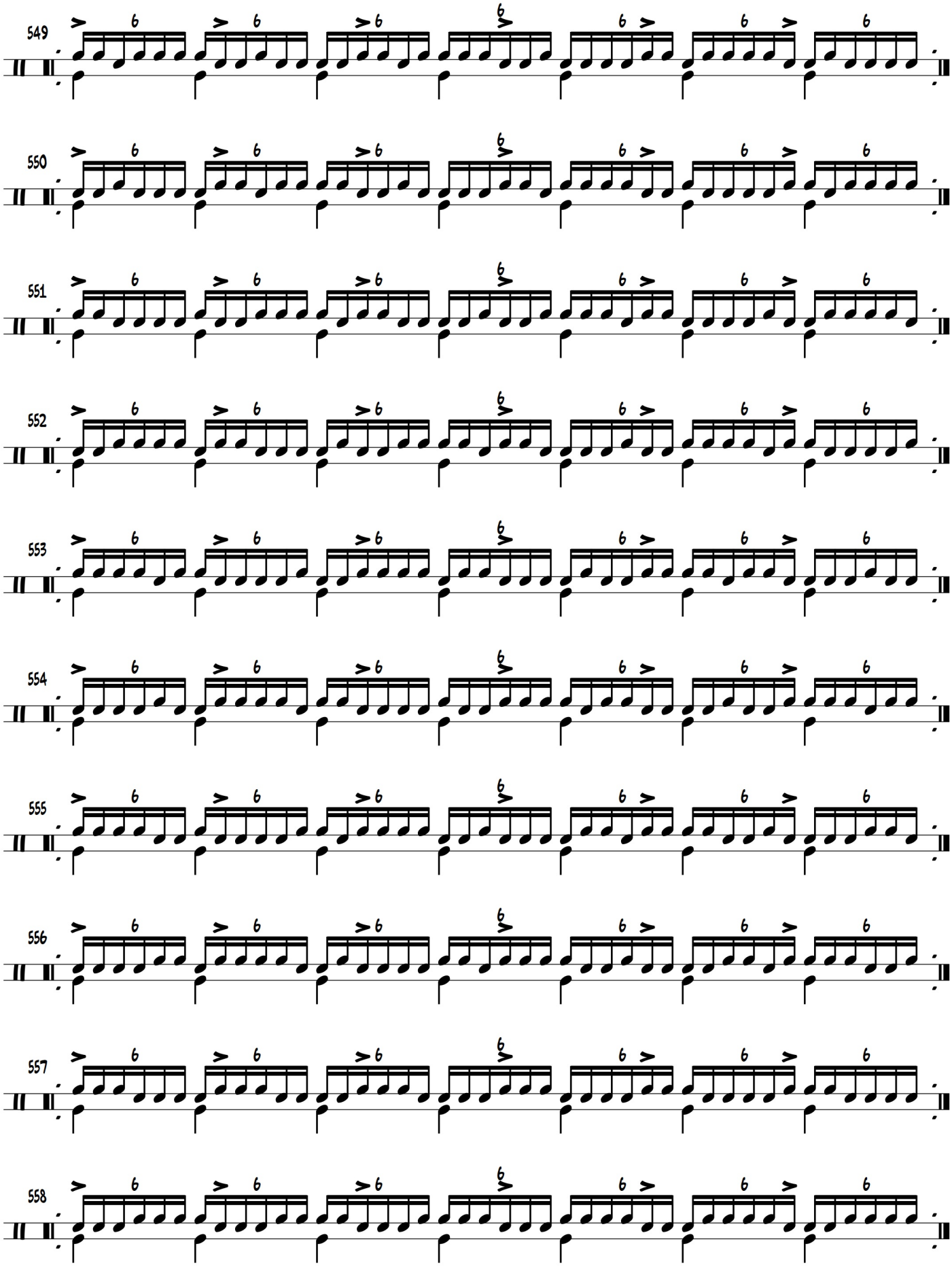
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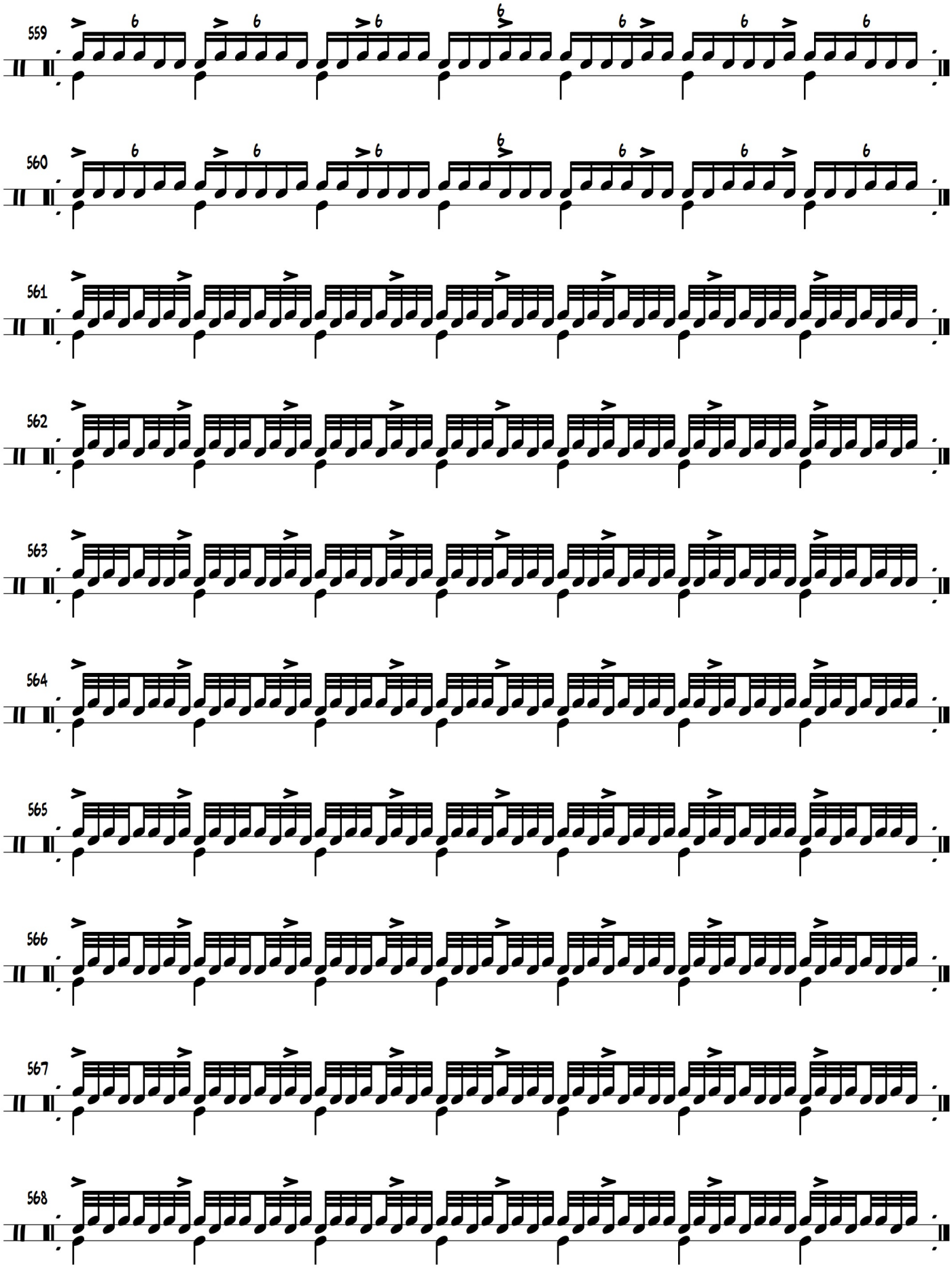
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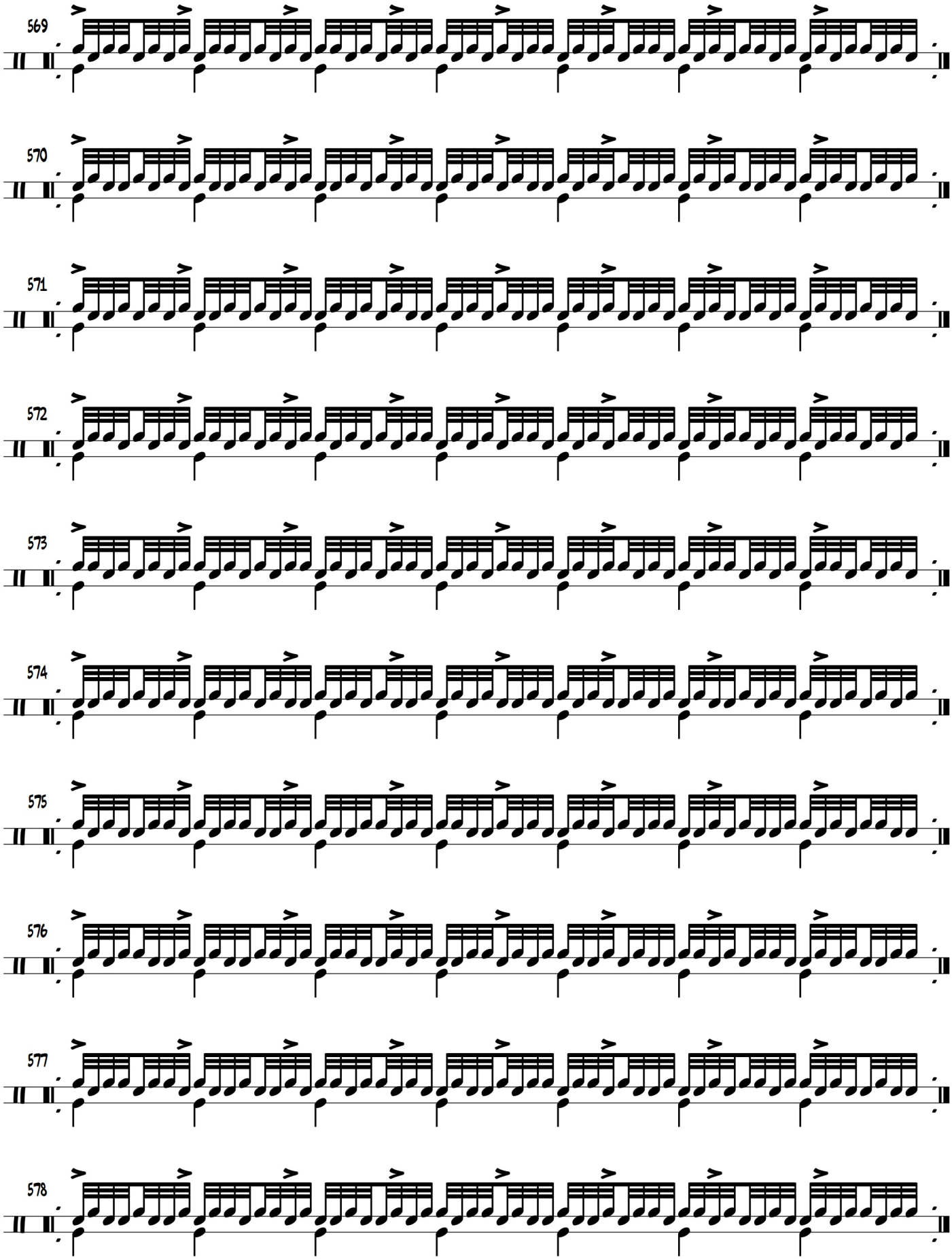
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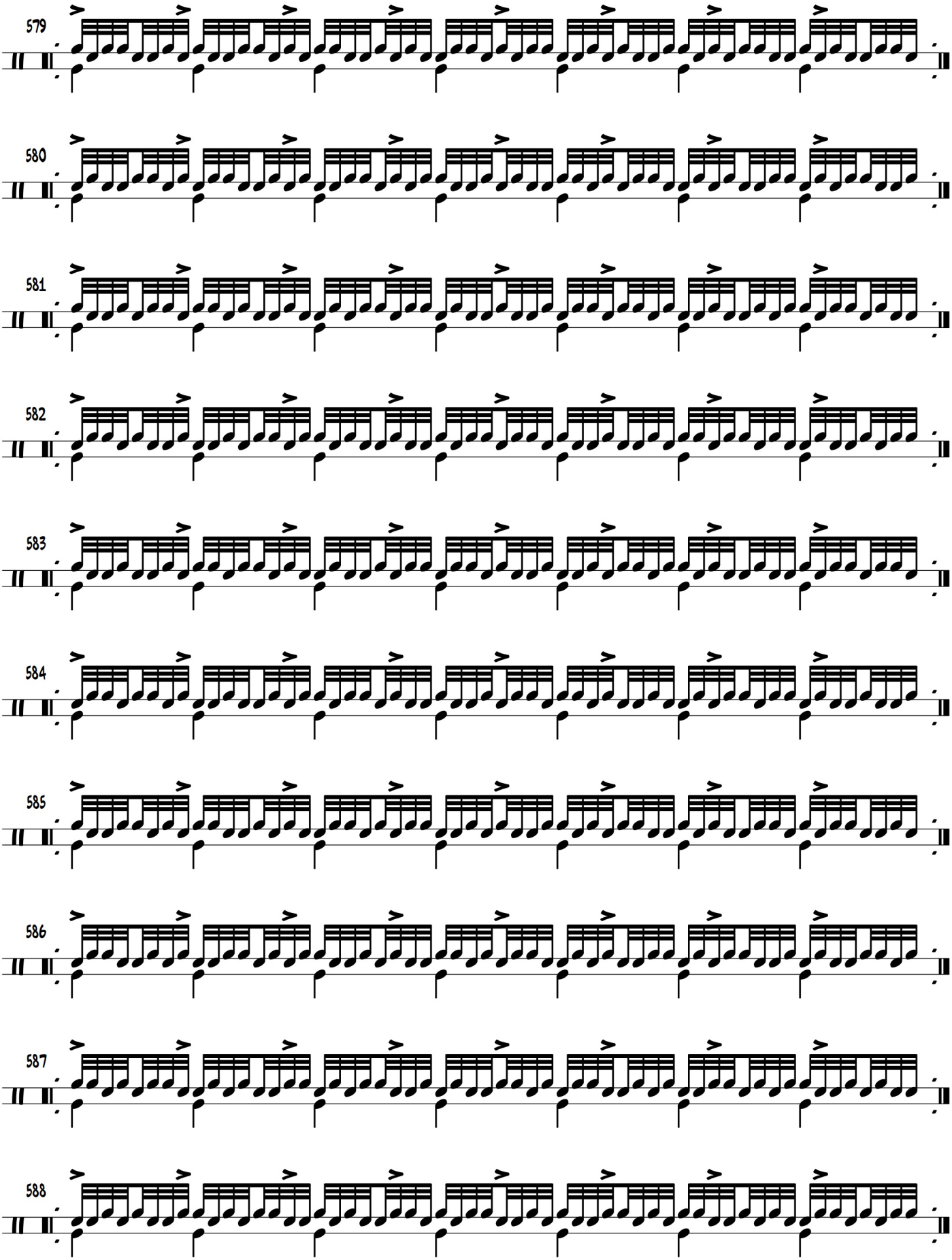
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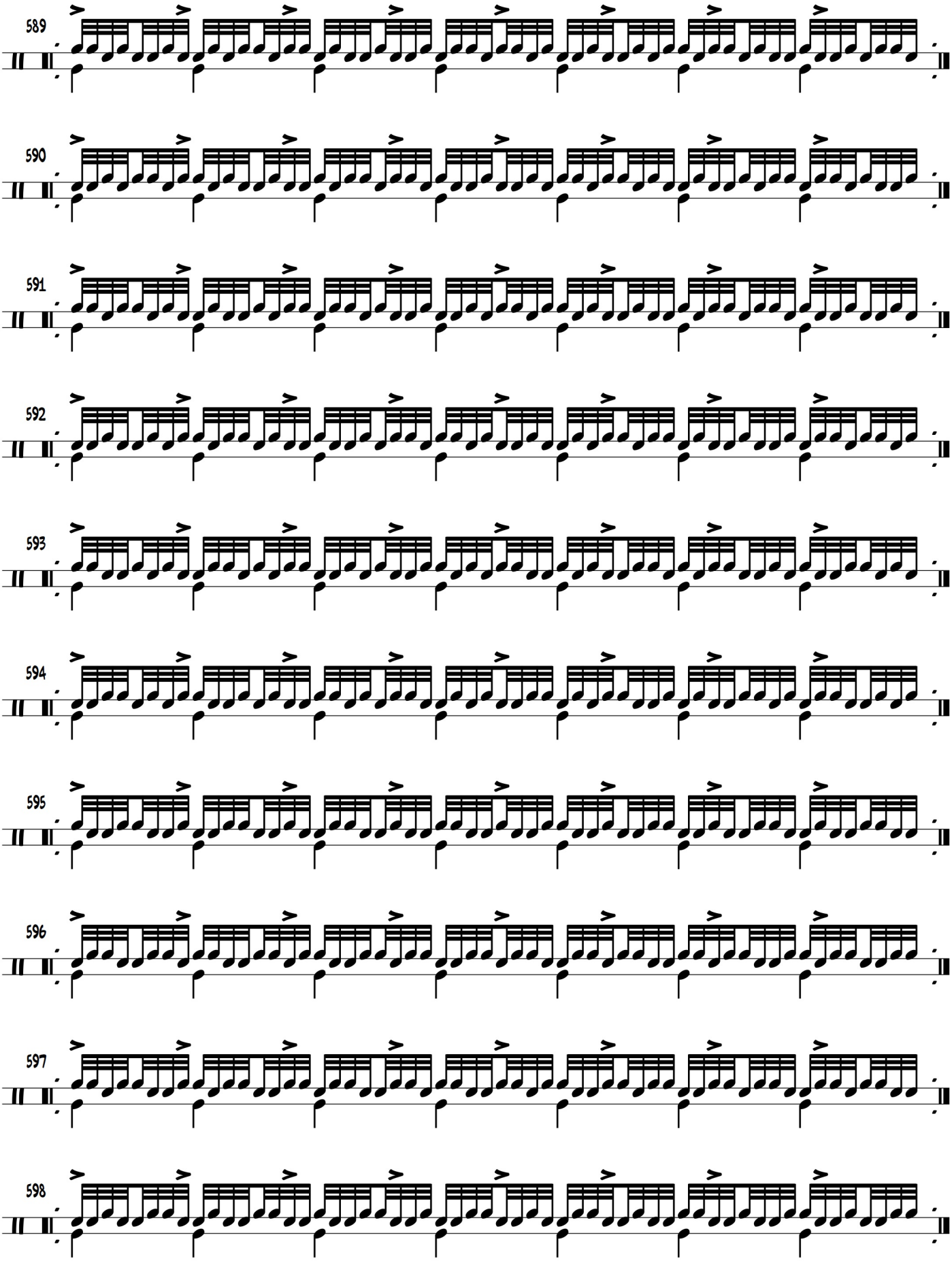
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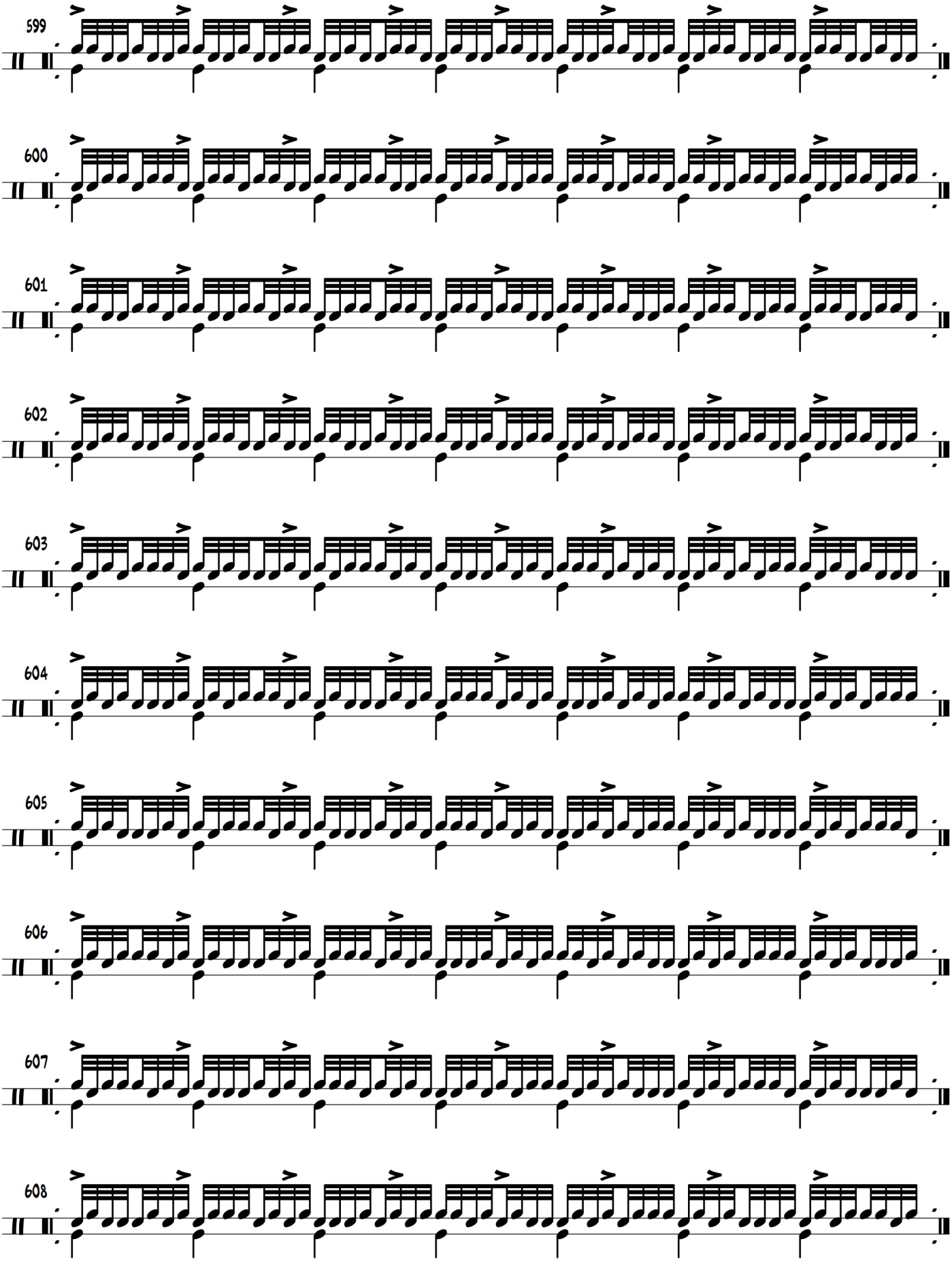
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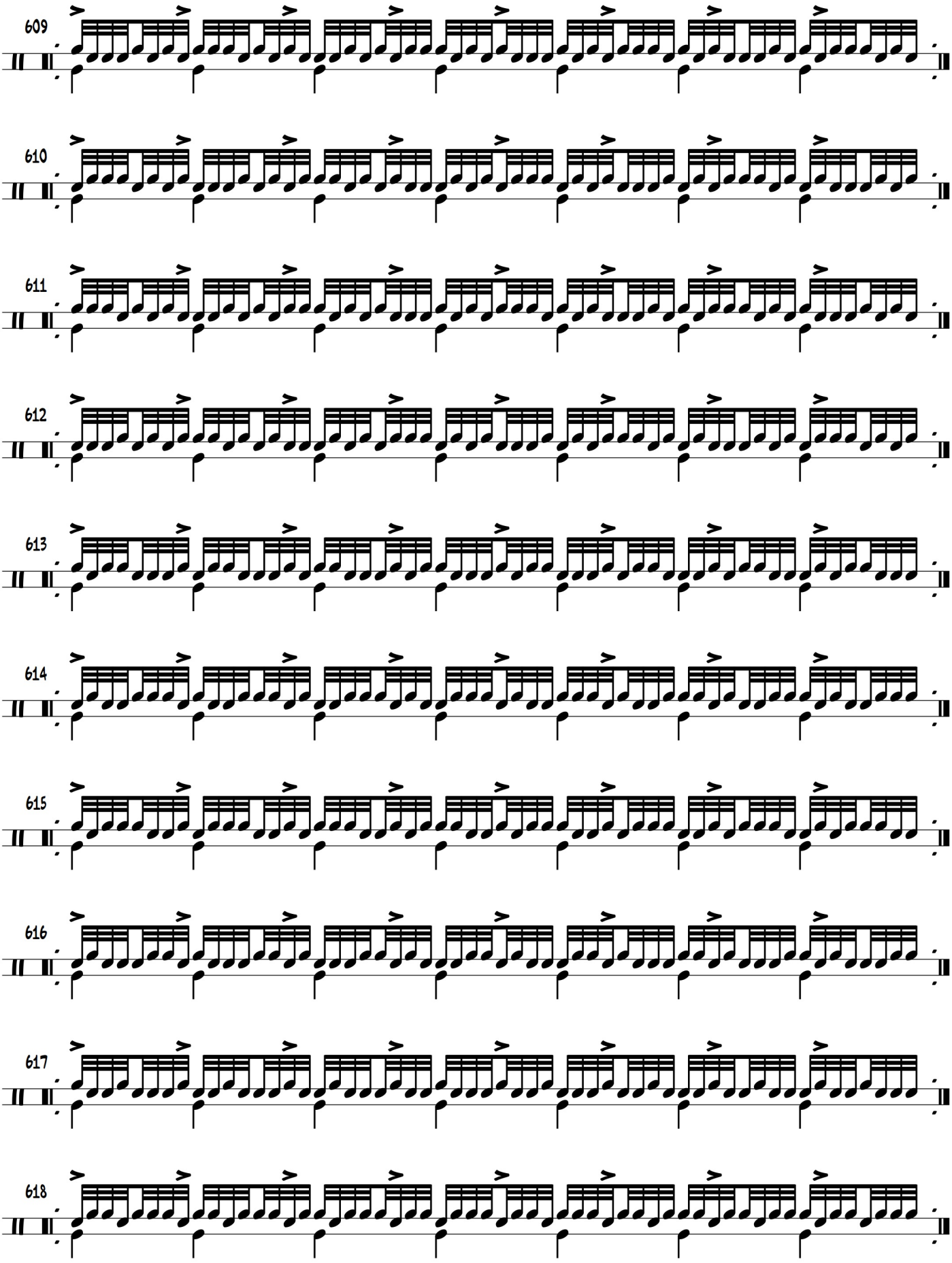
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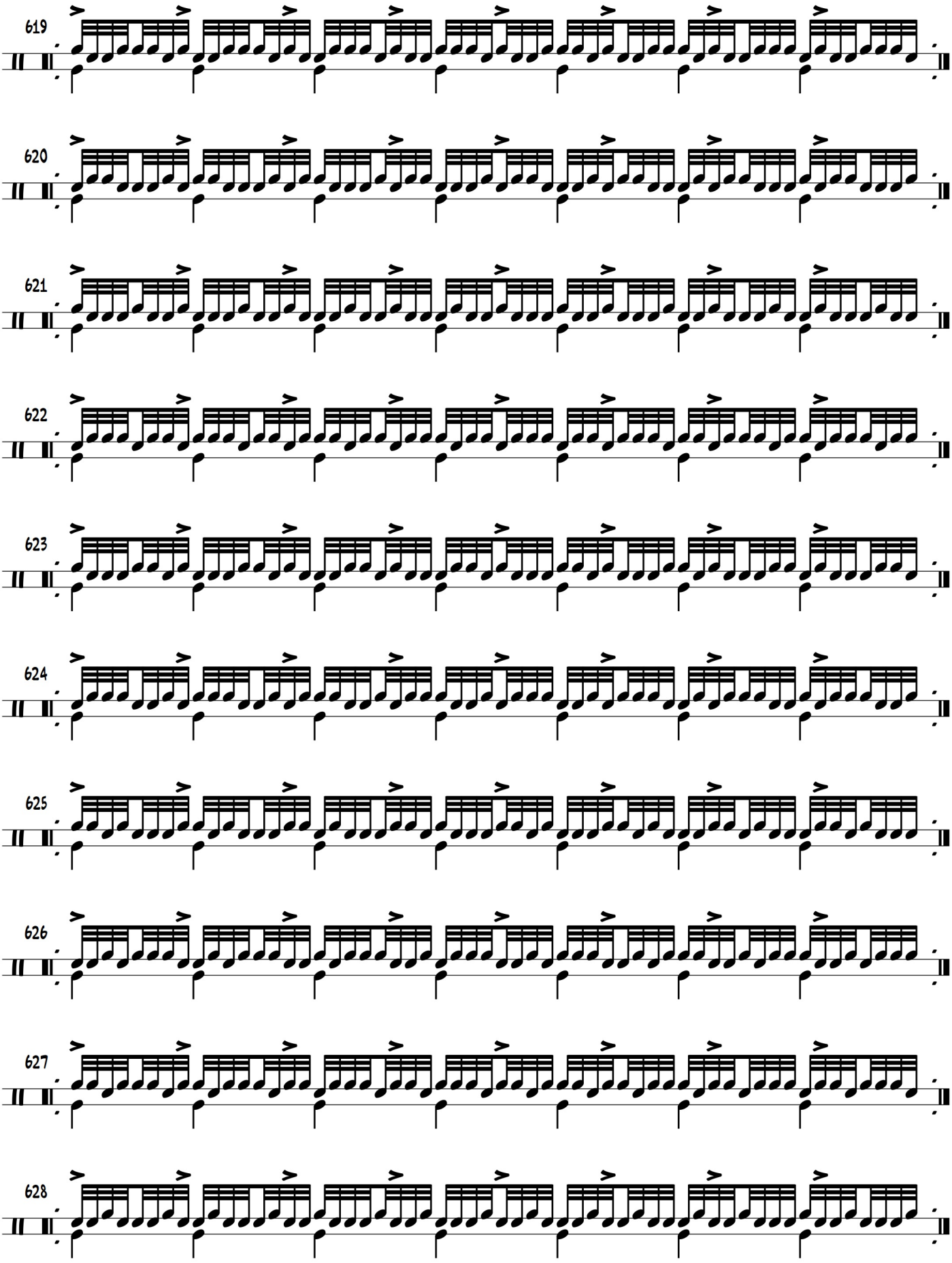
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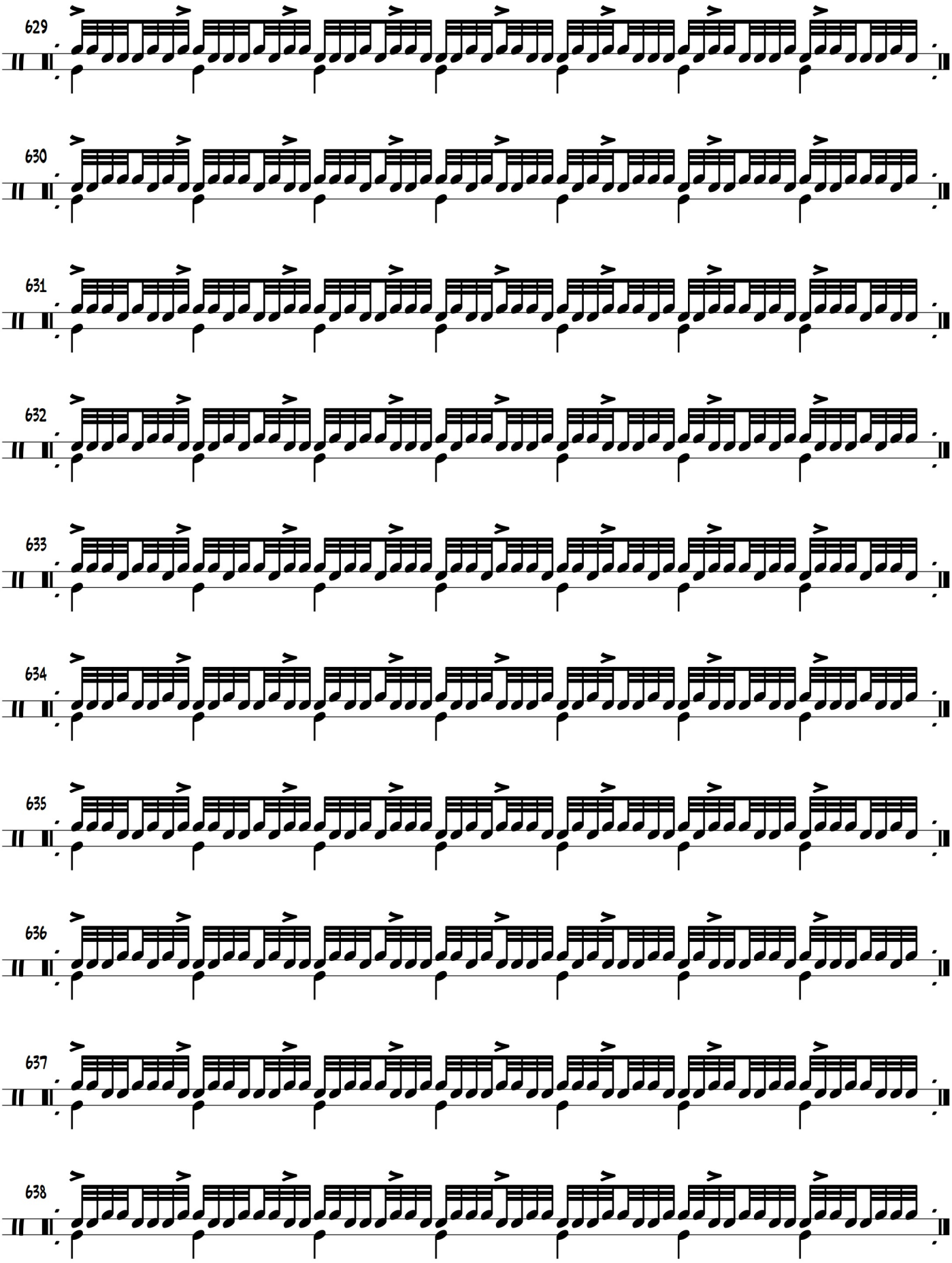
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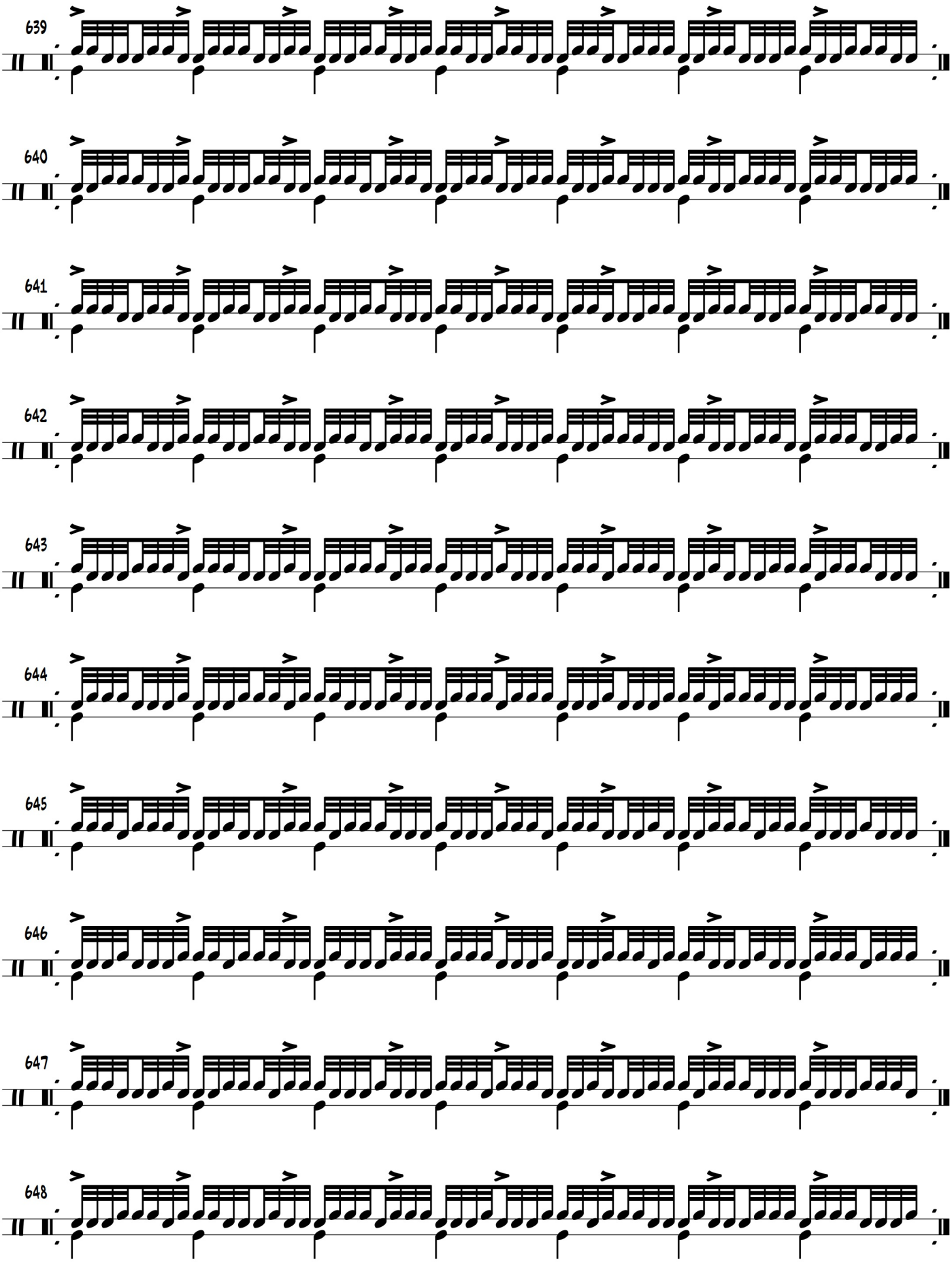
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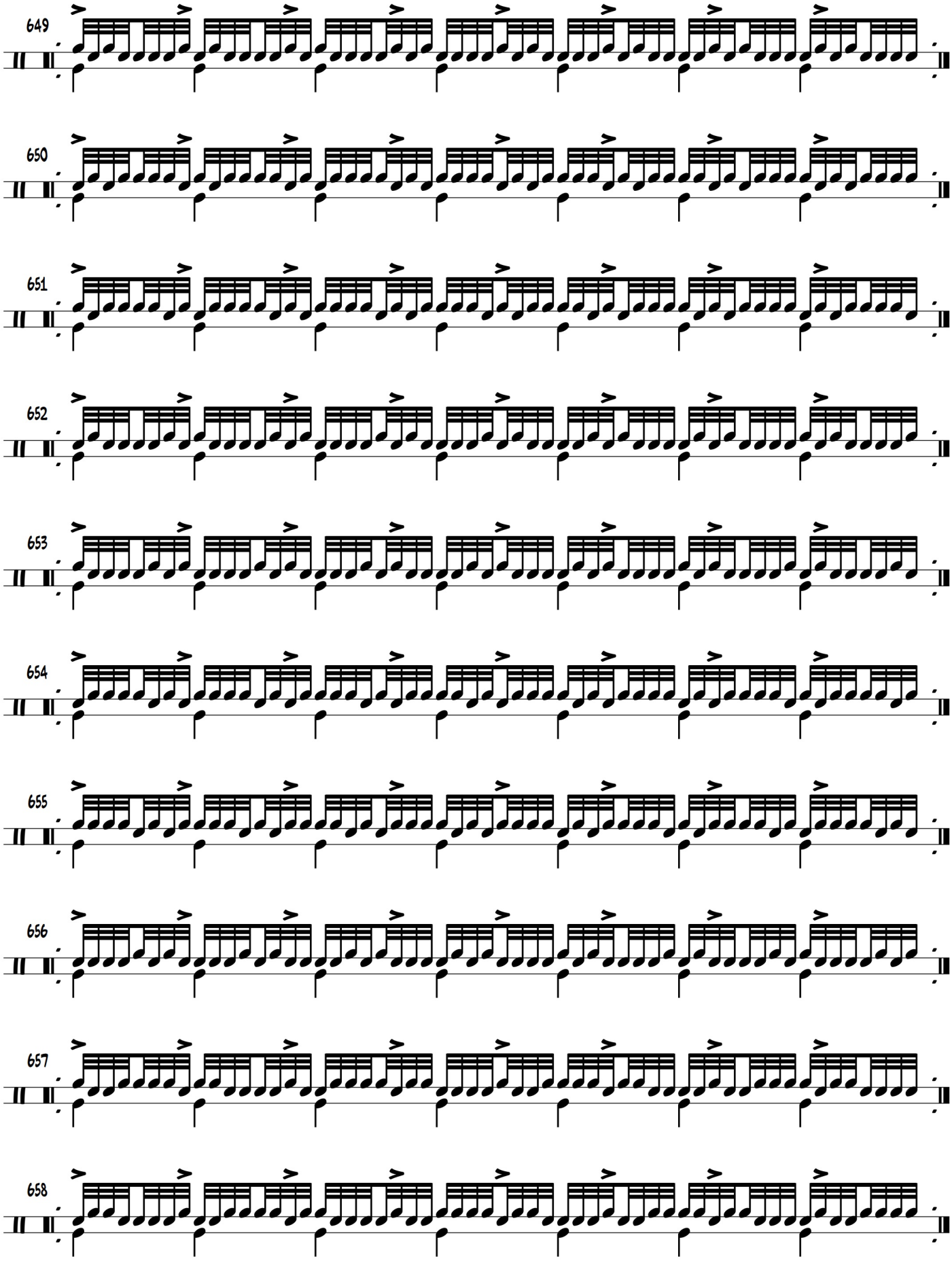
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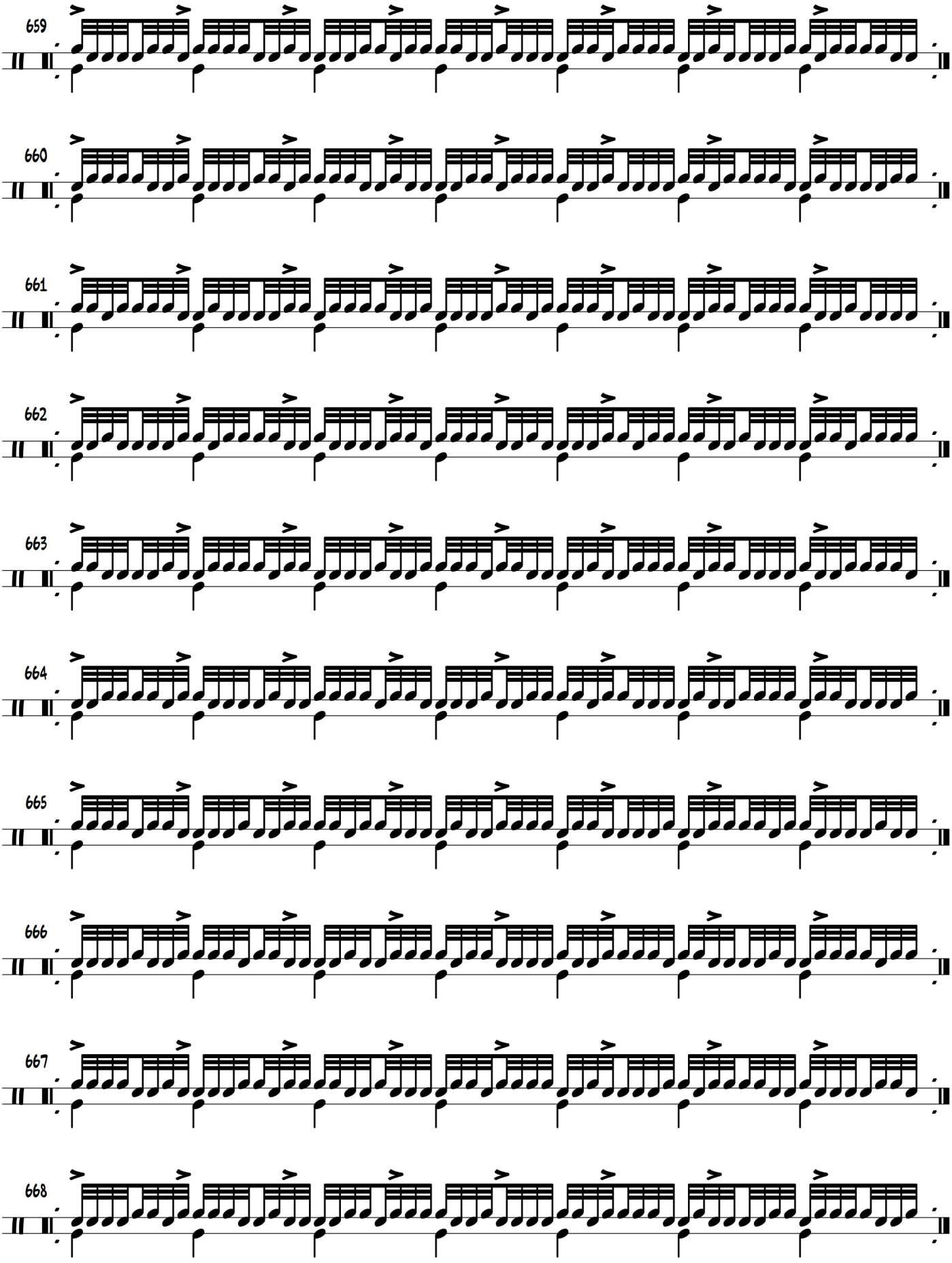
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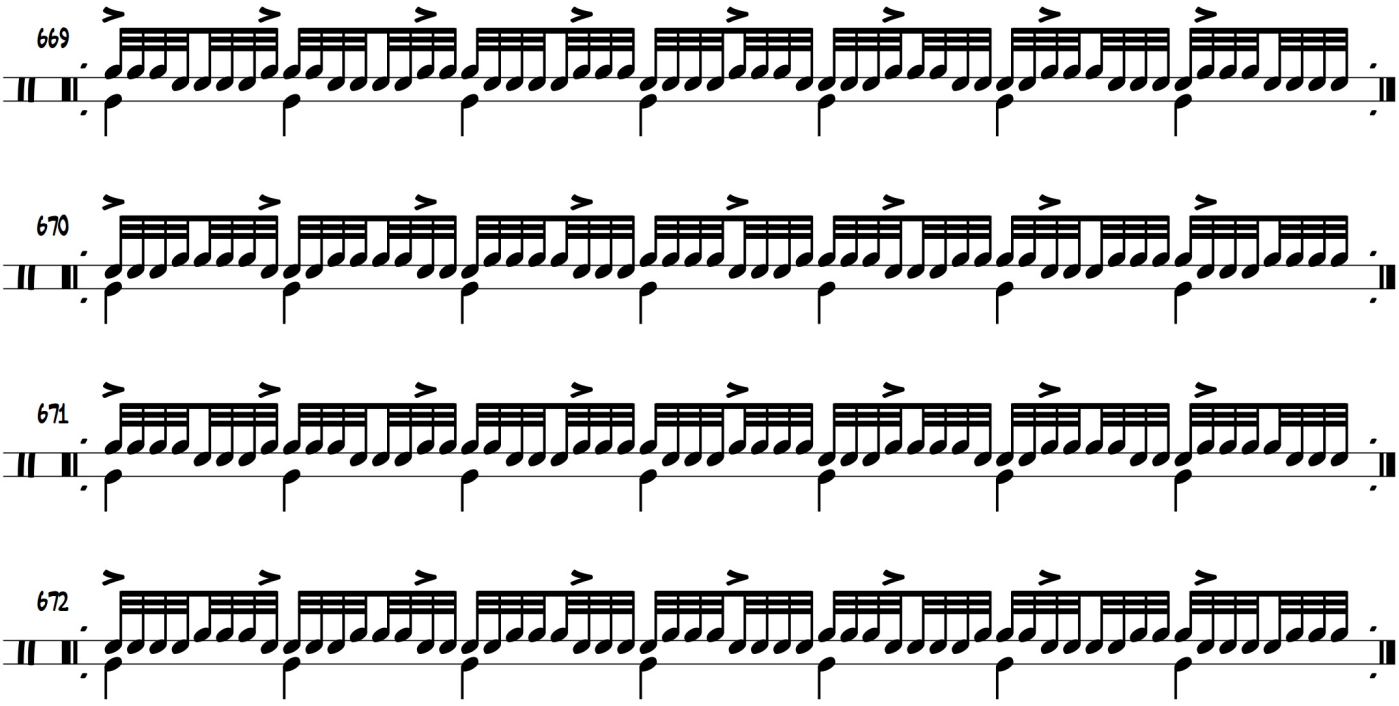
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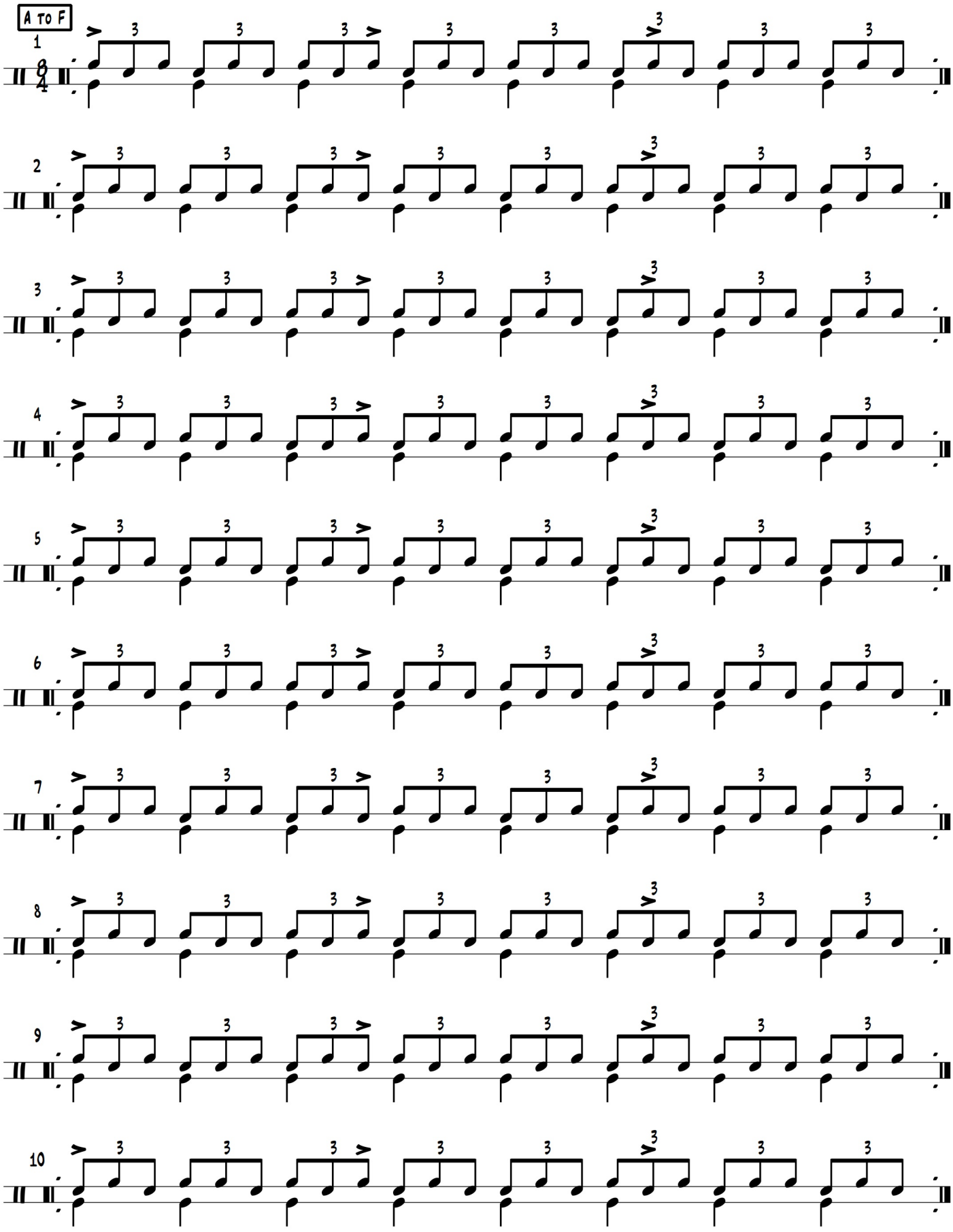
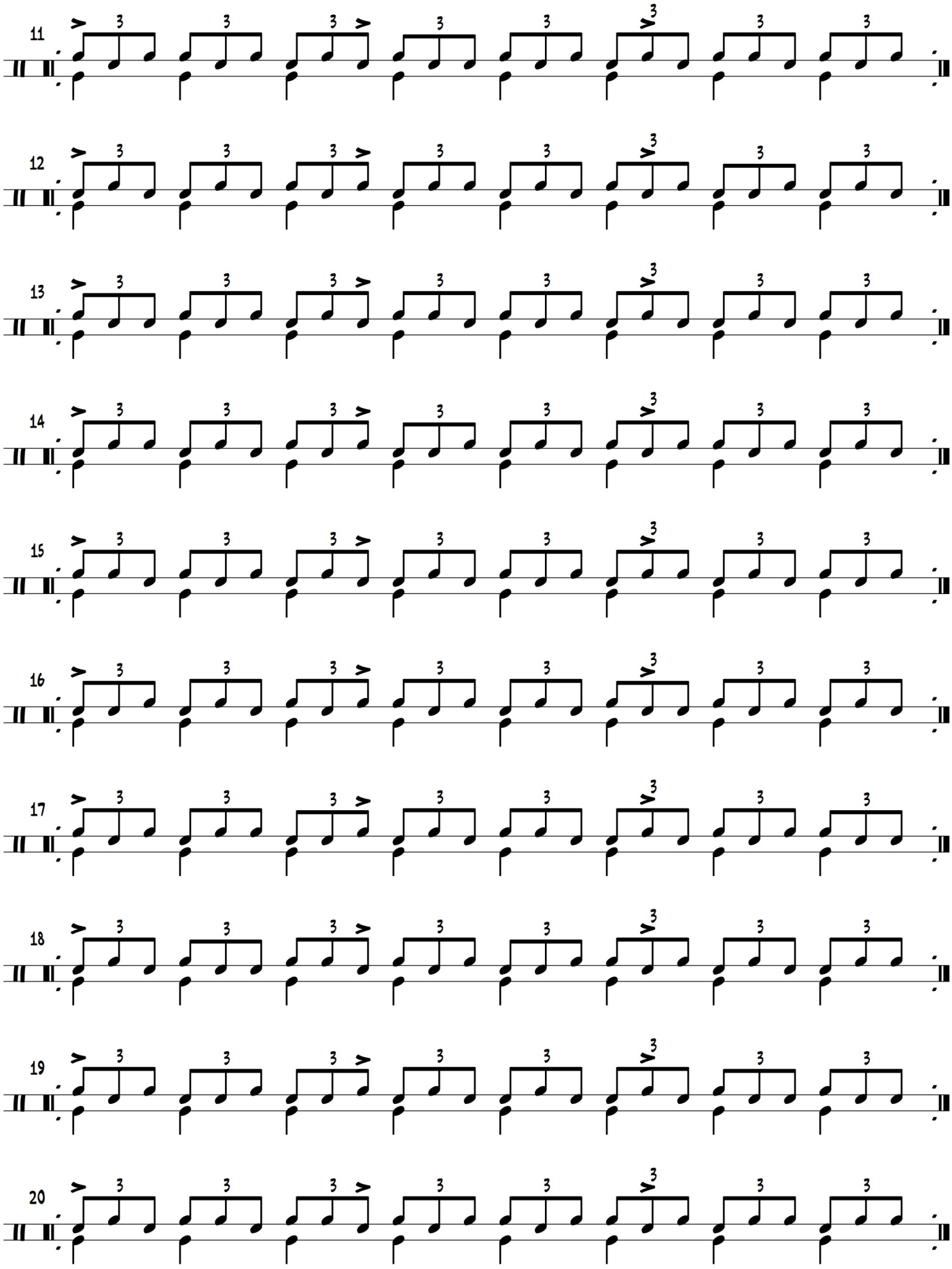
Chapter 3 - The Polyrhythms: 8-meter

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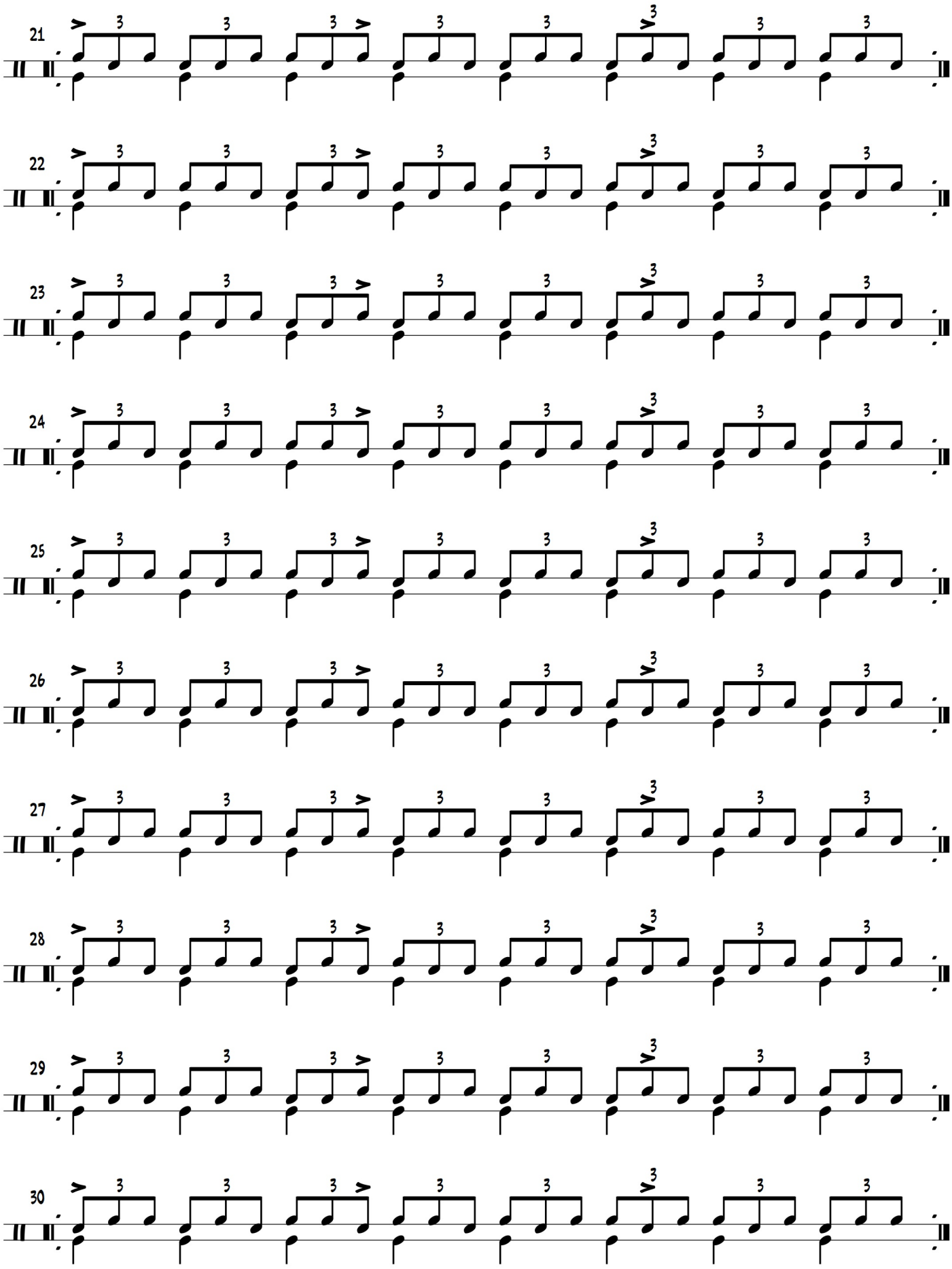
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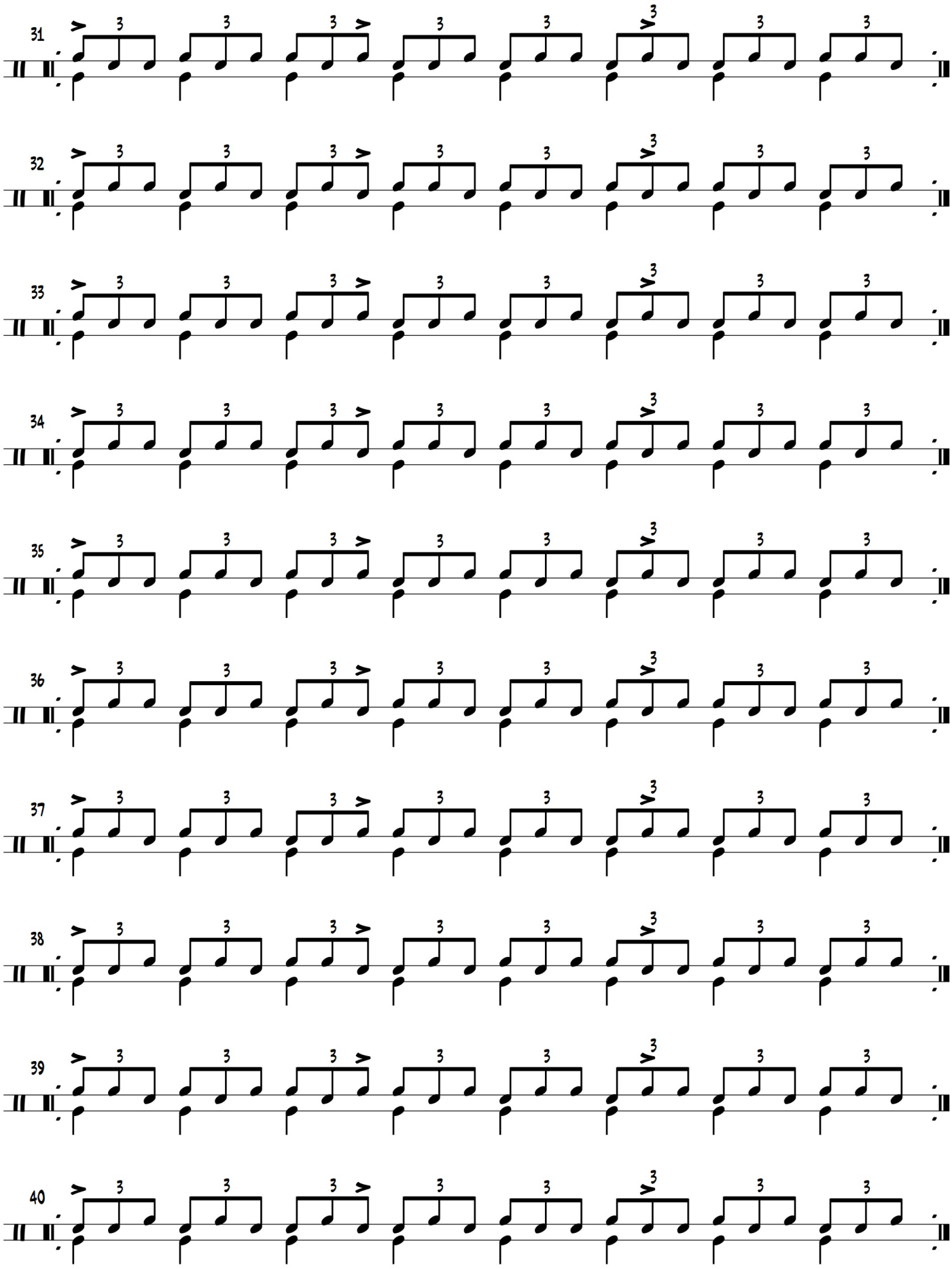
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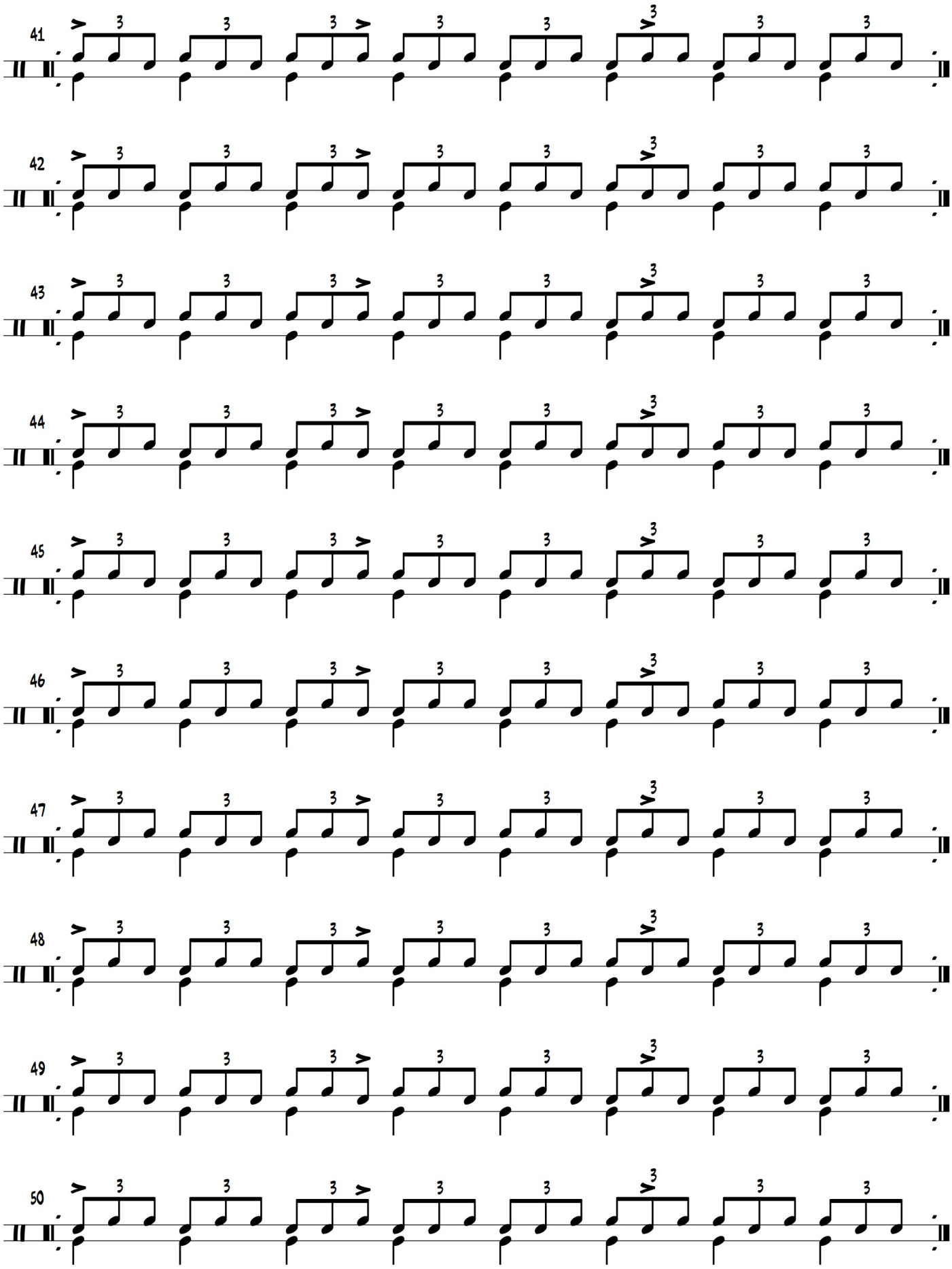
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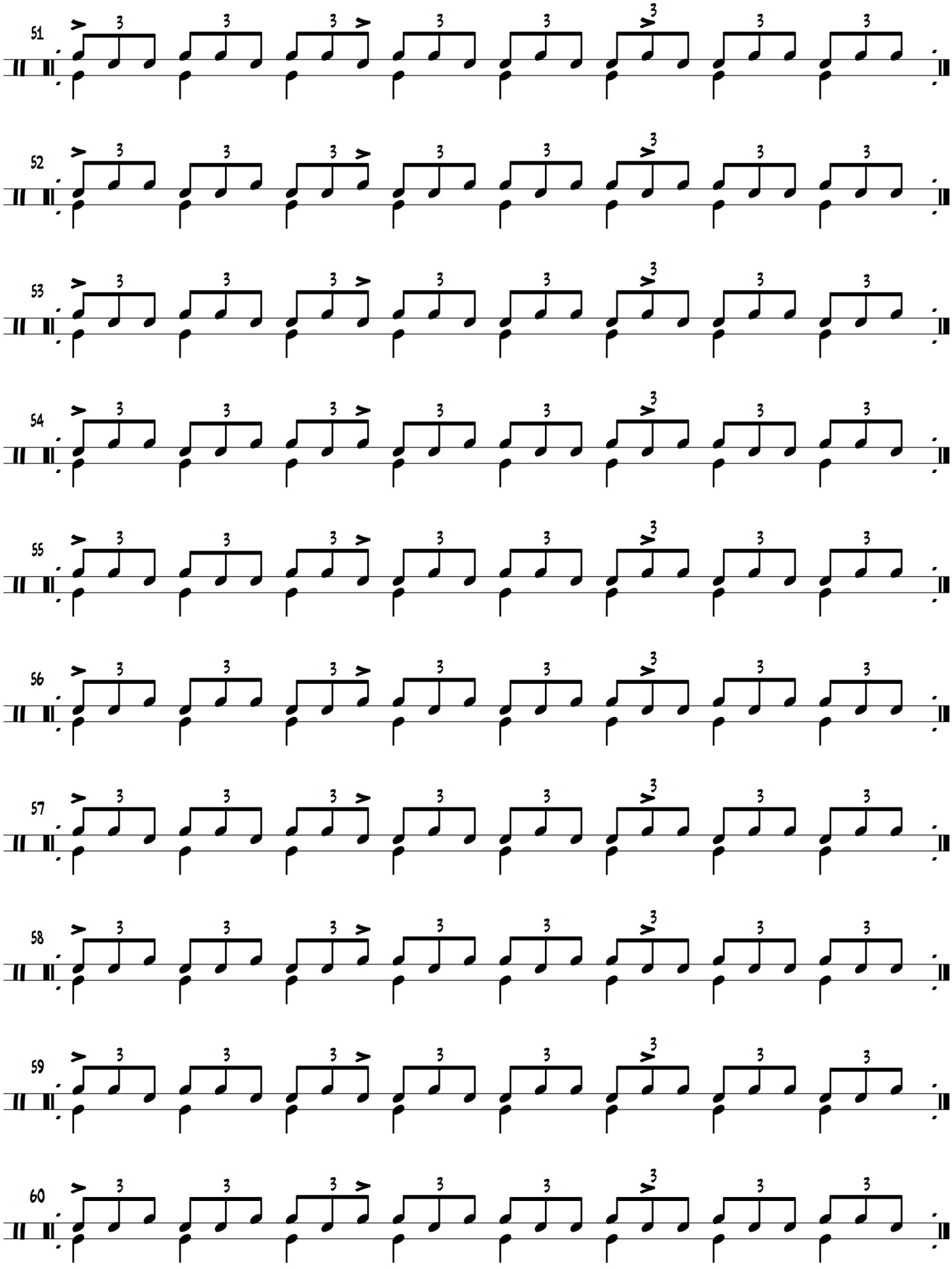
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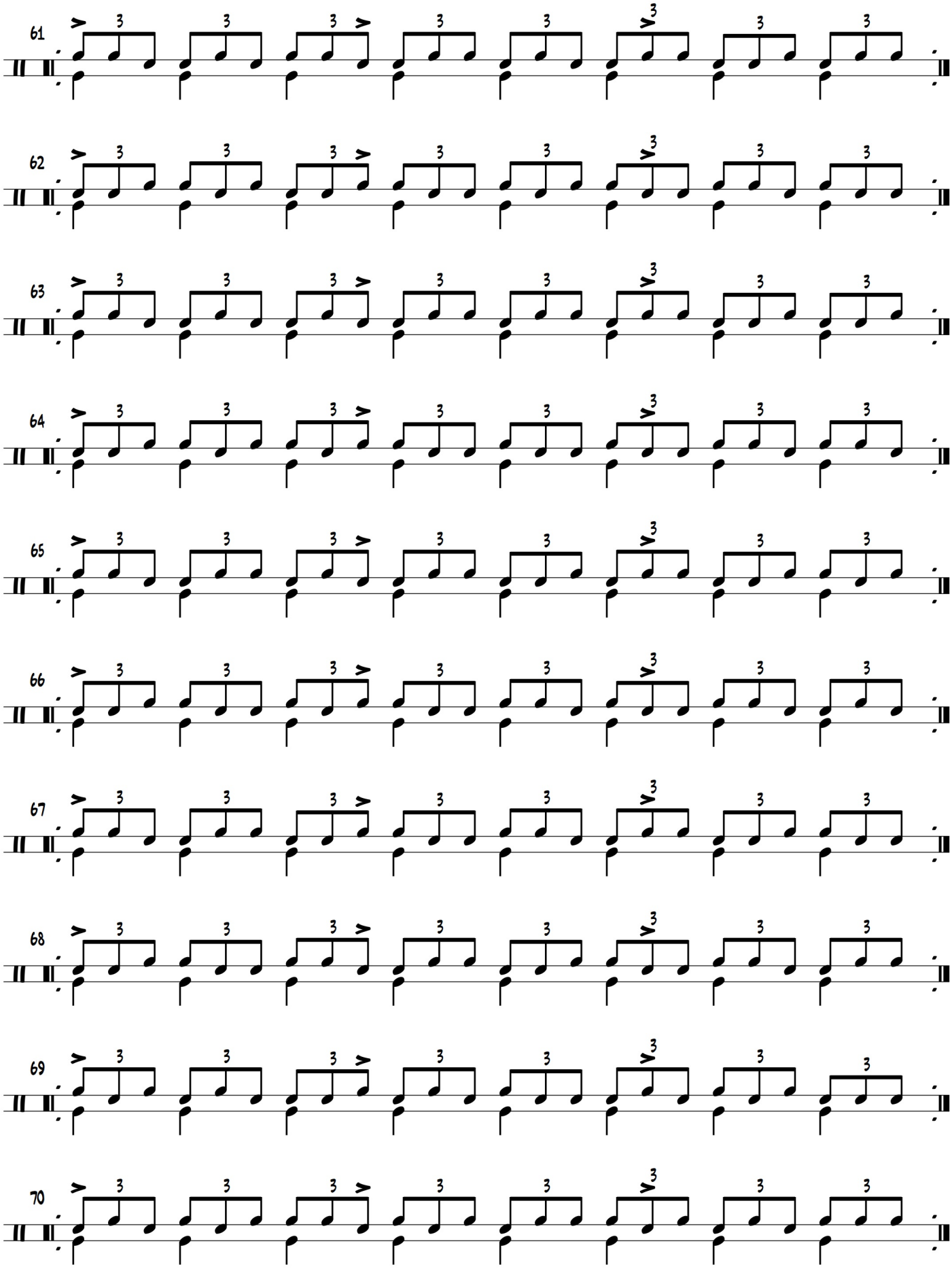
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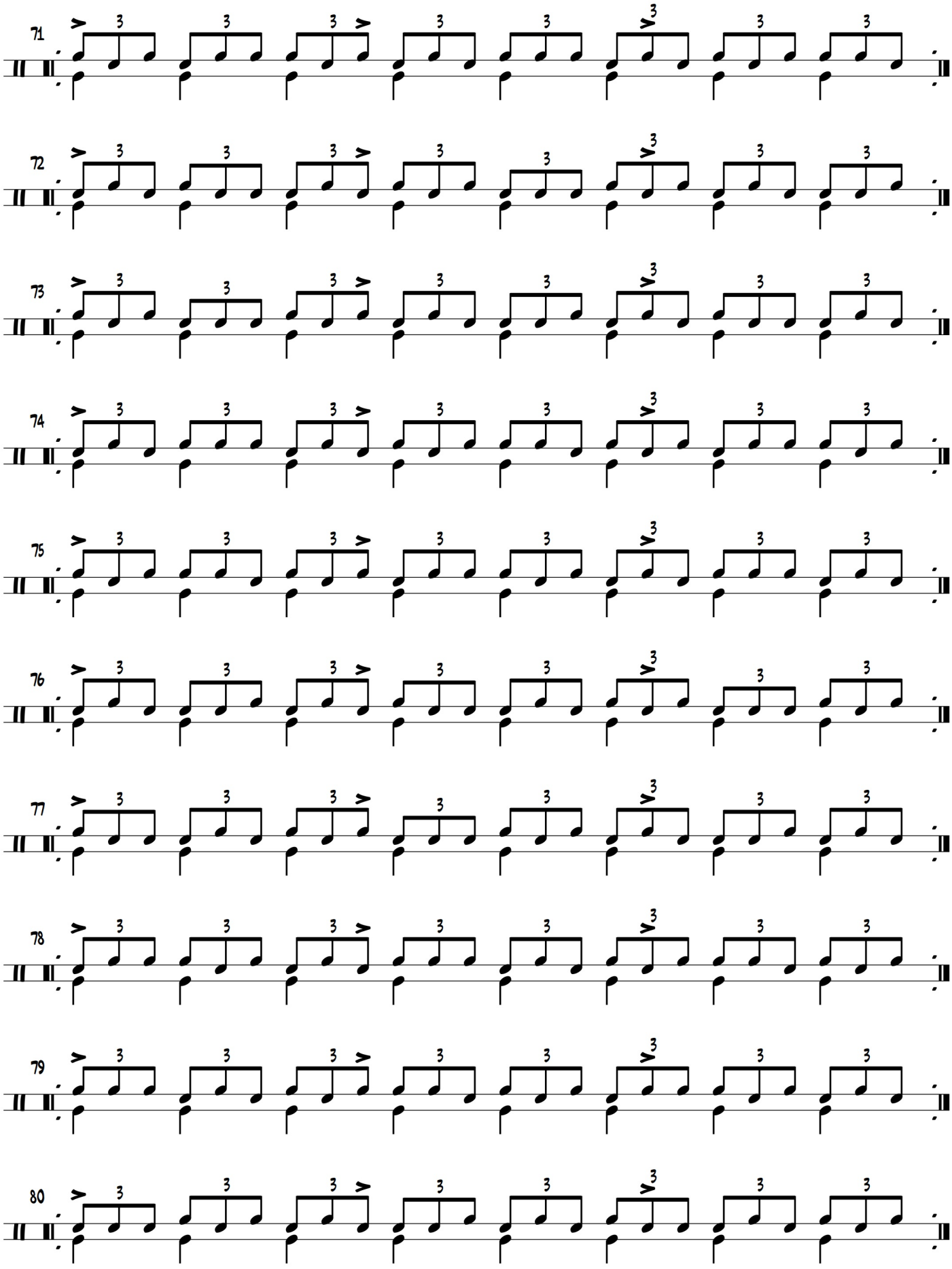
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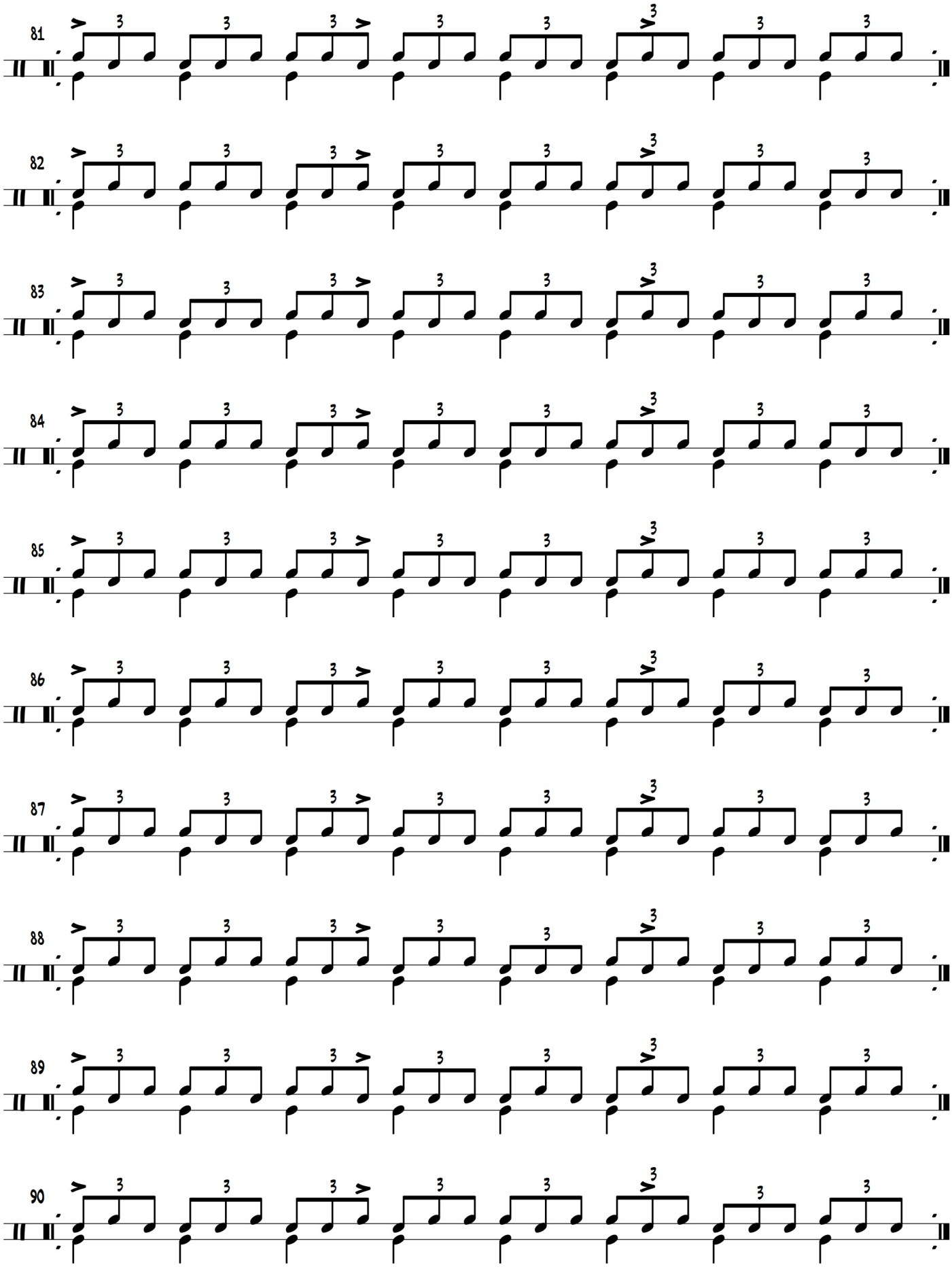
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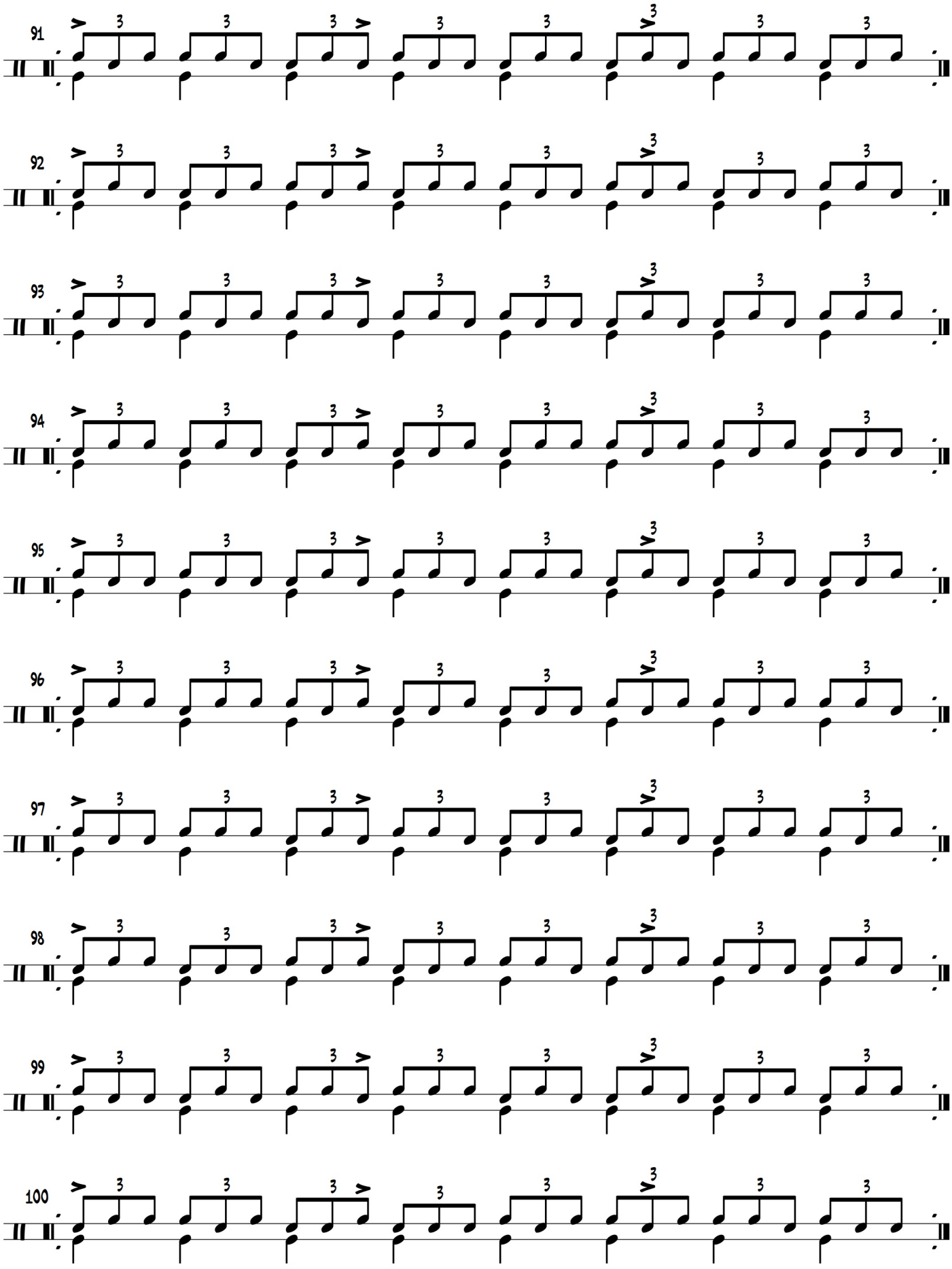
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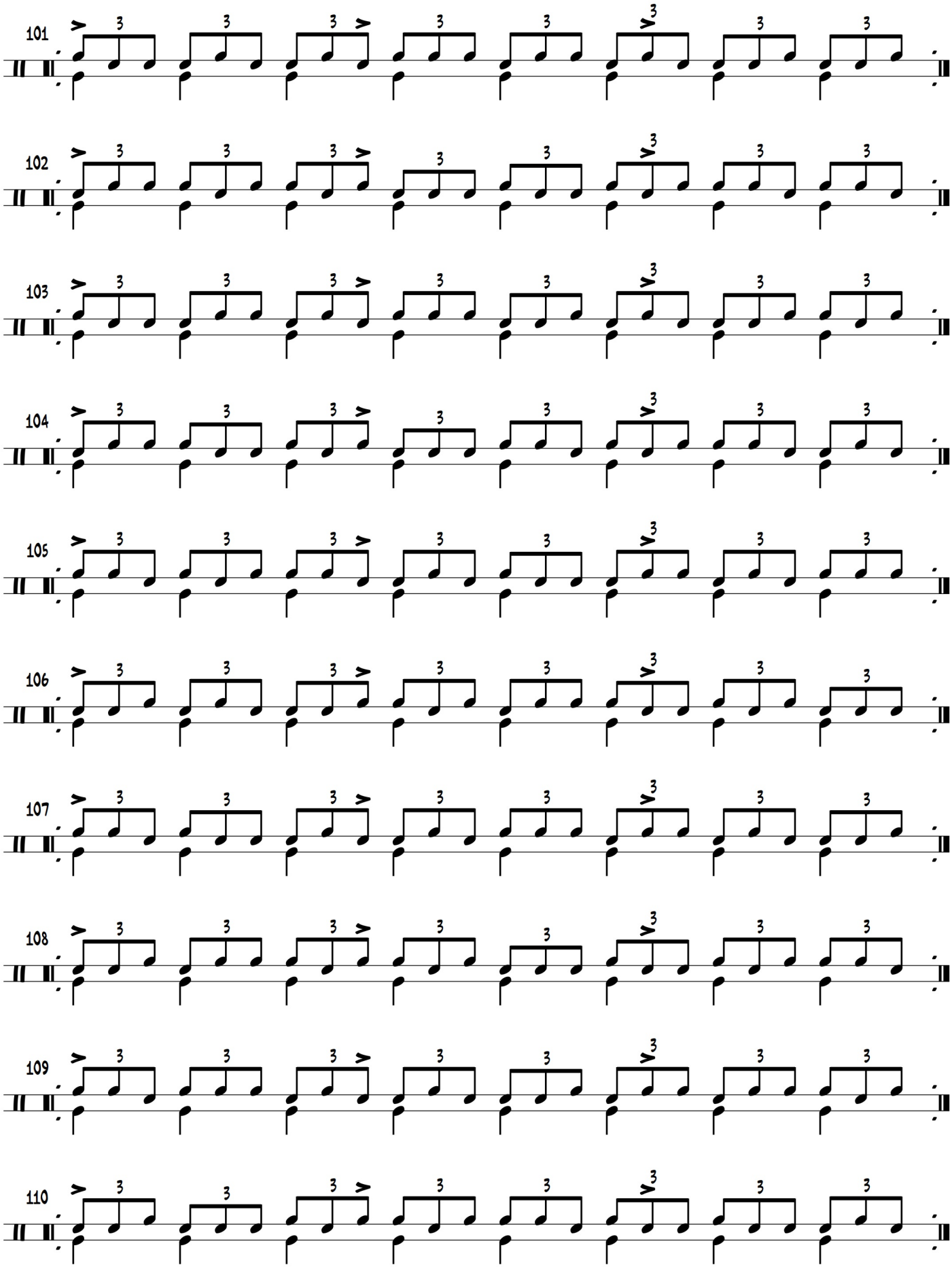
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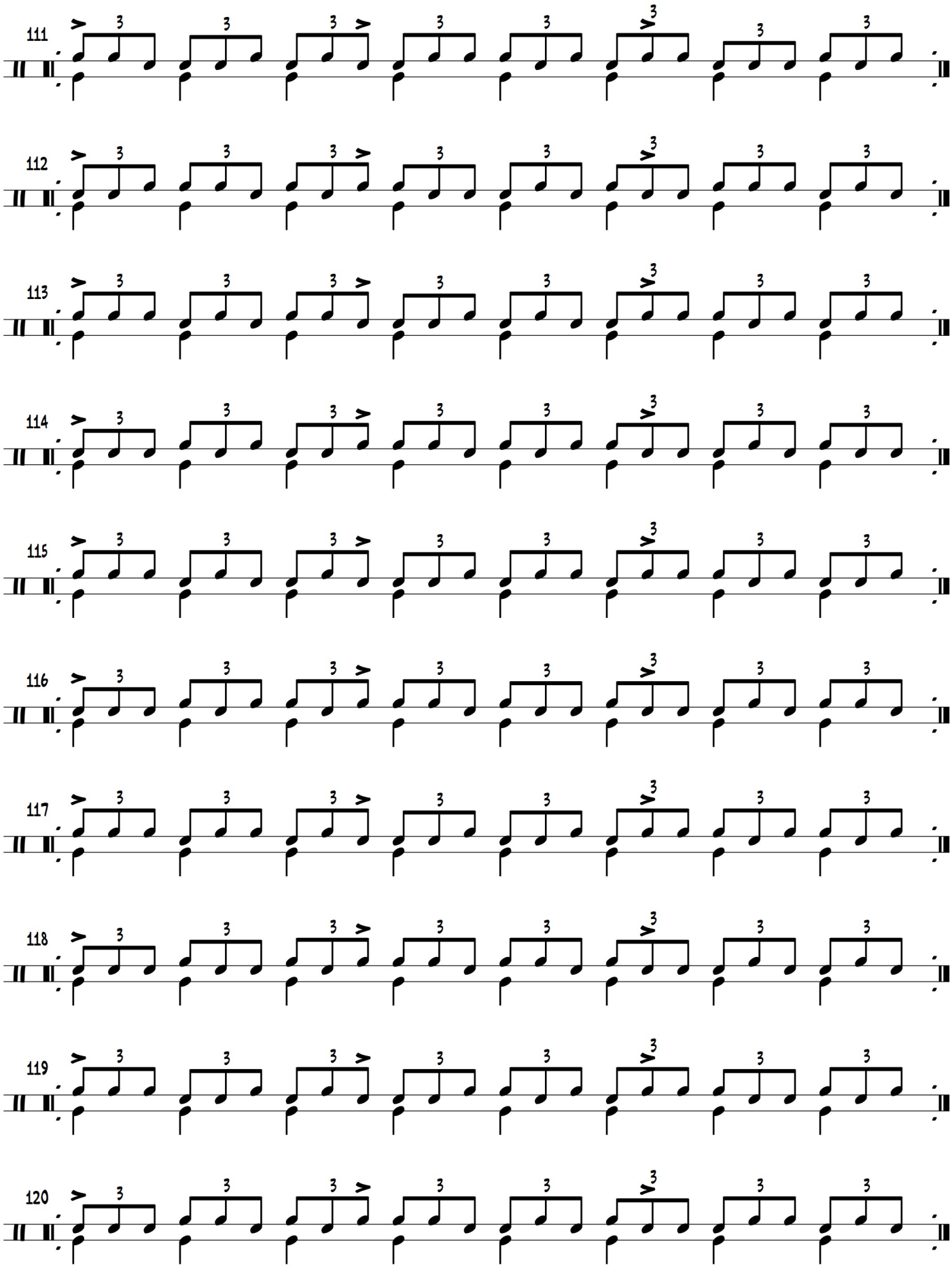
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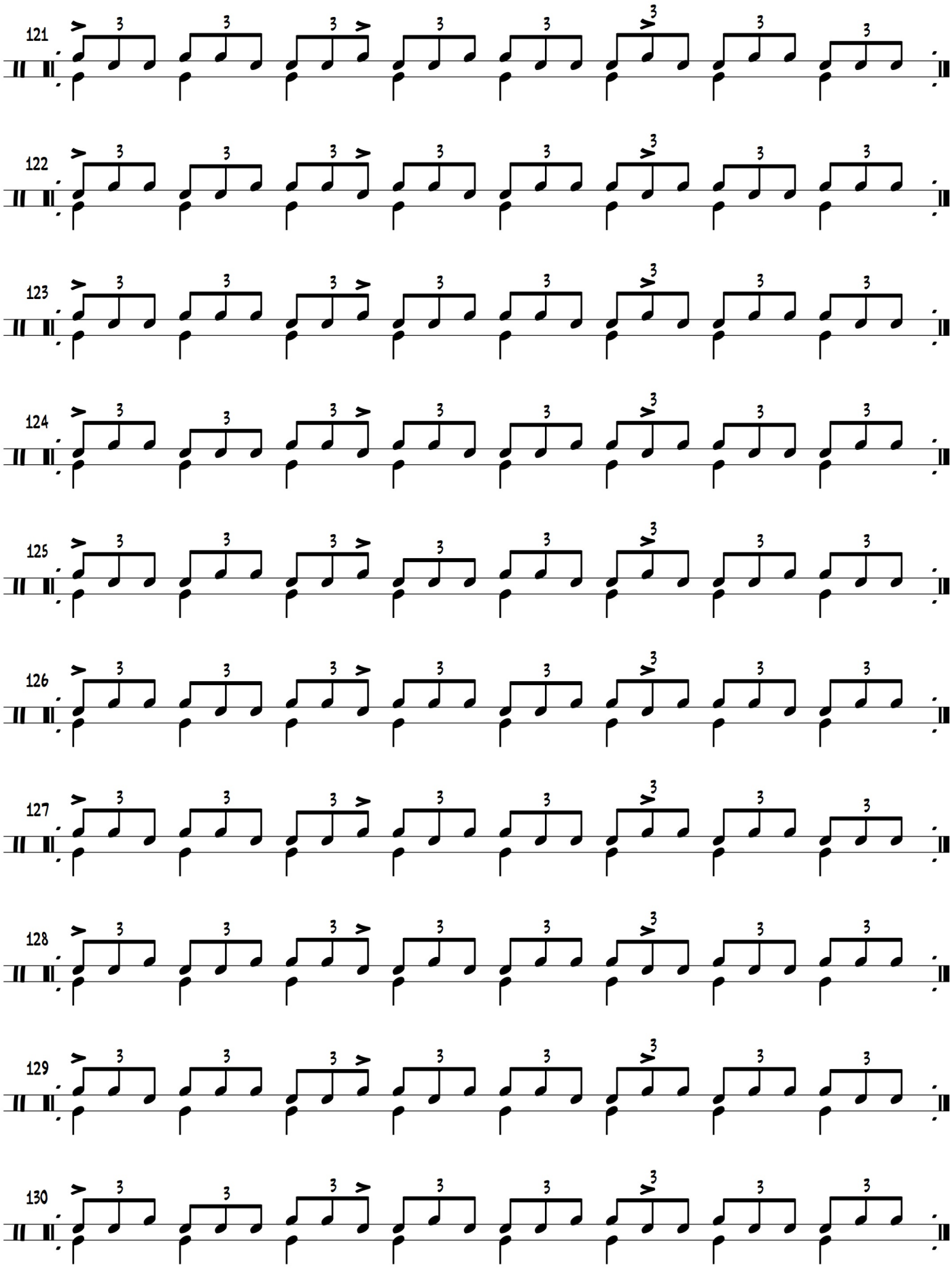
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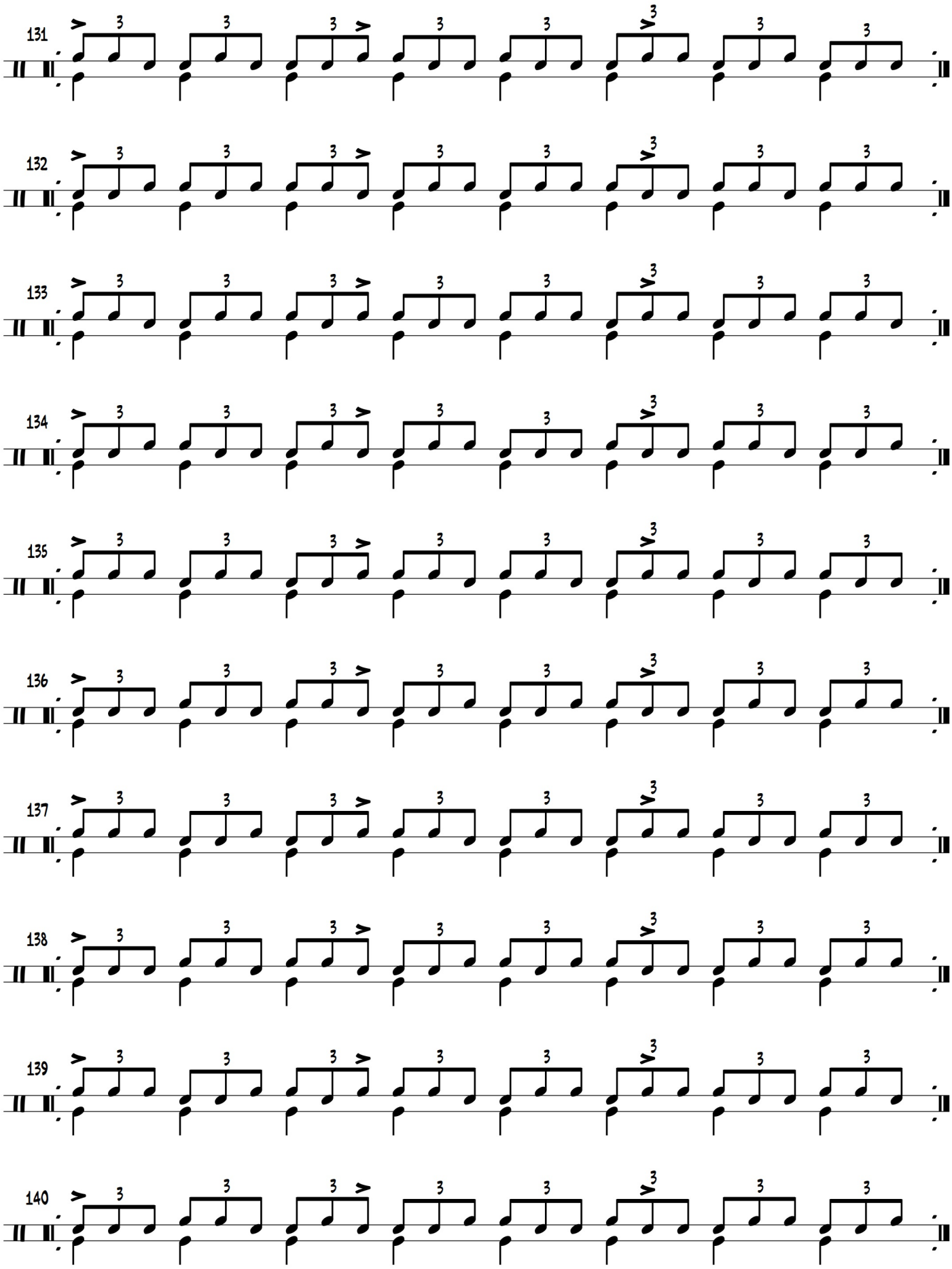
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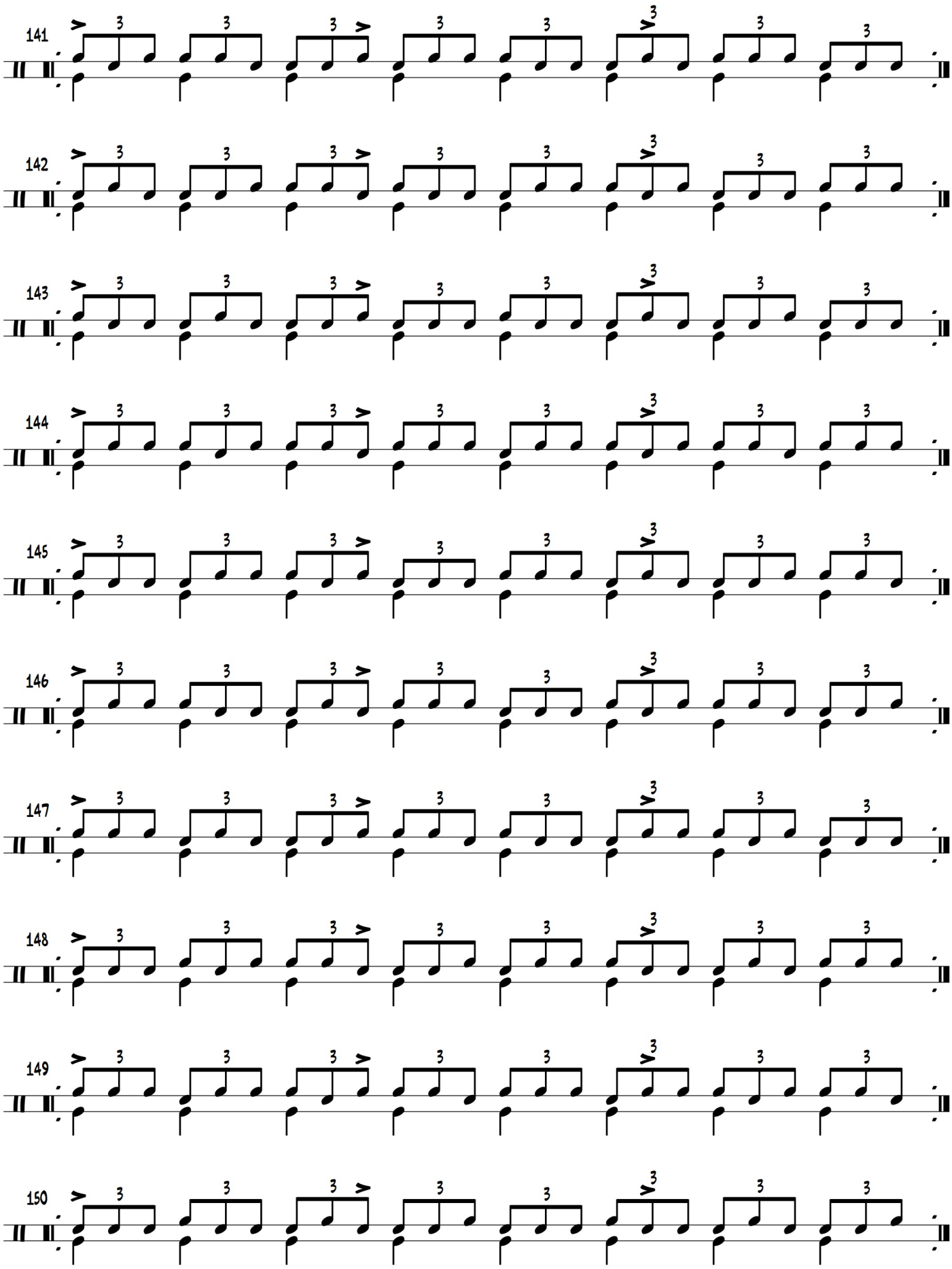
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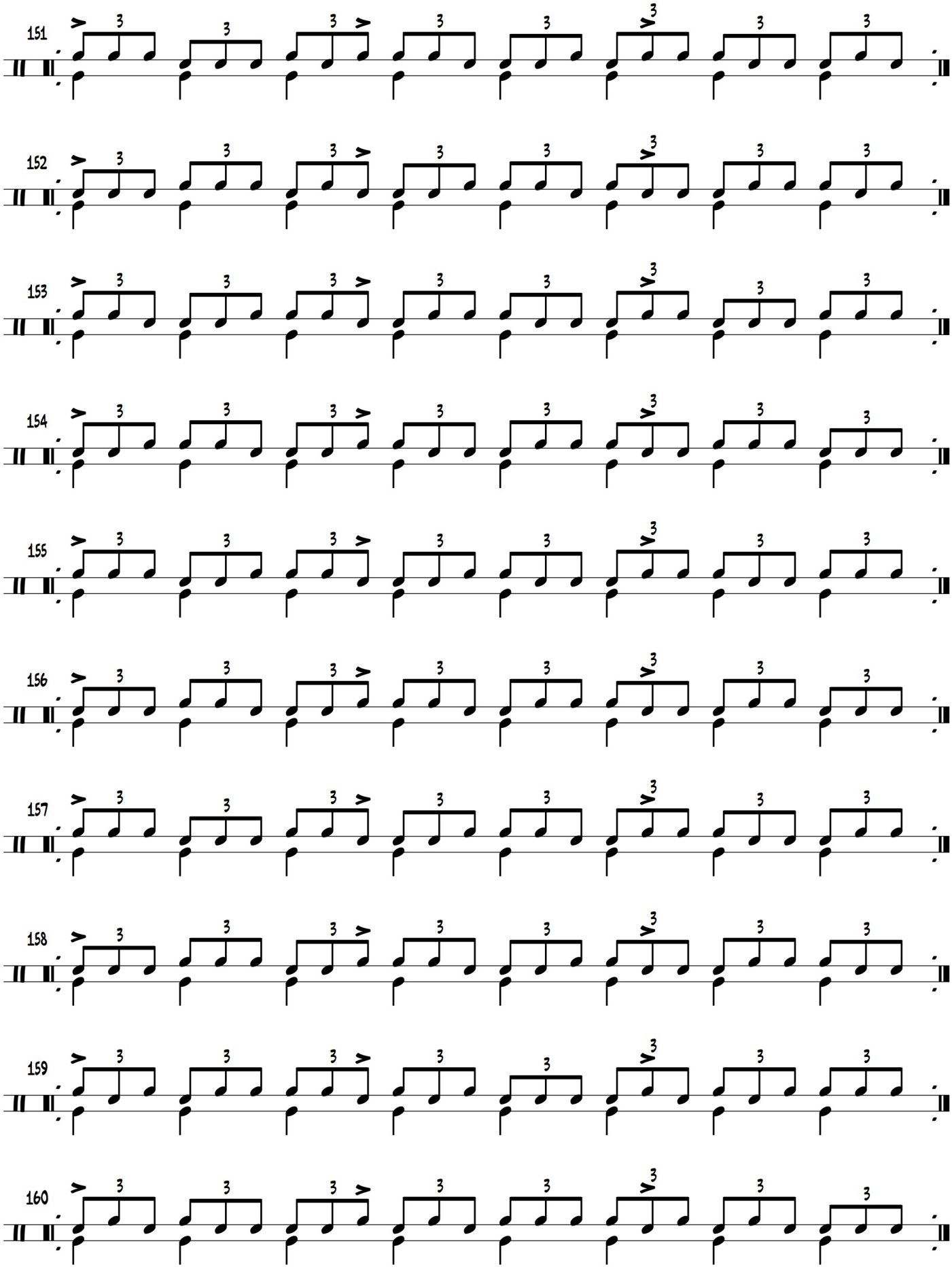
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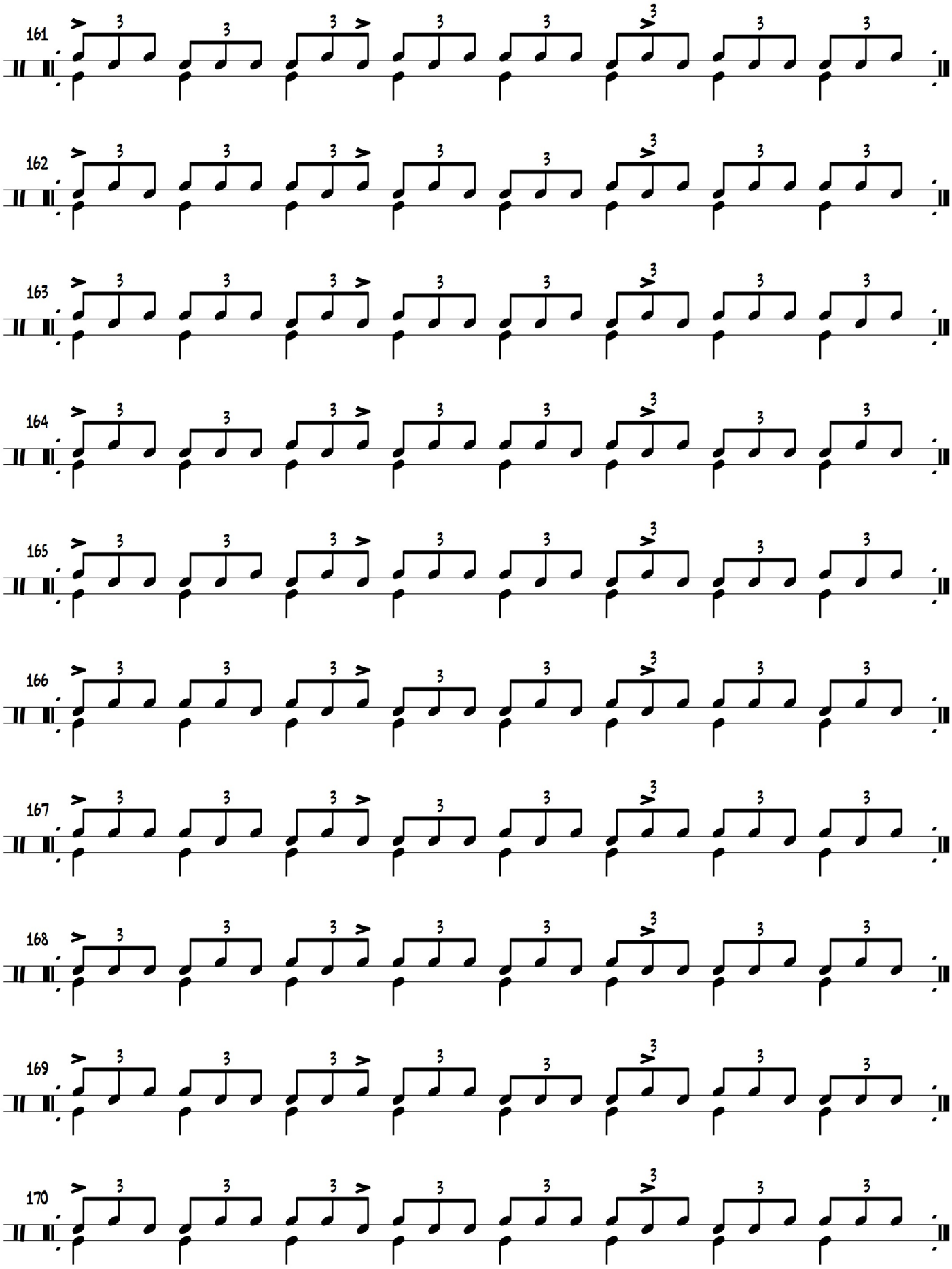
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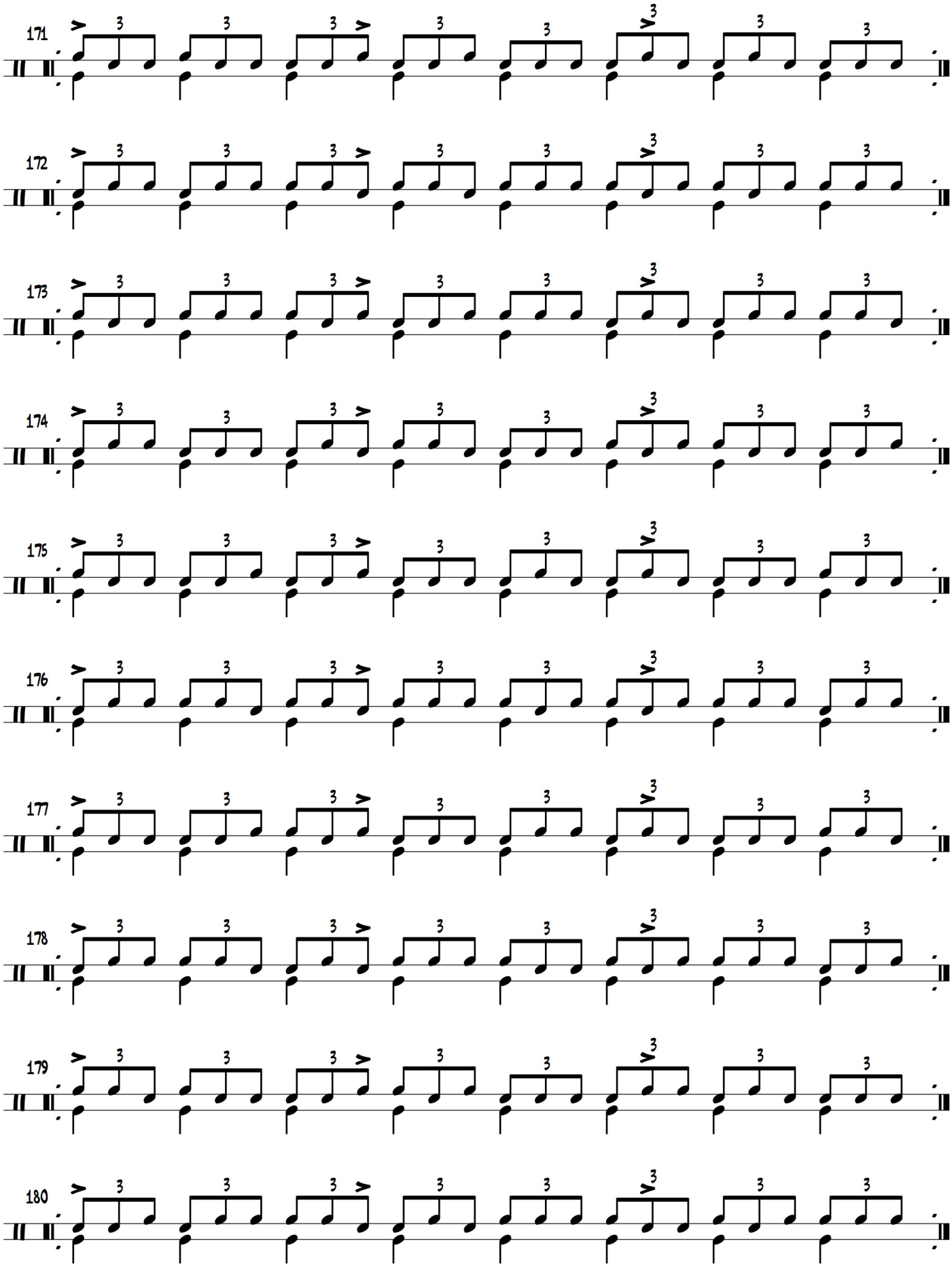
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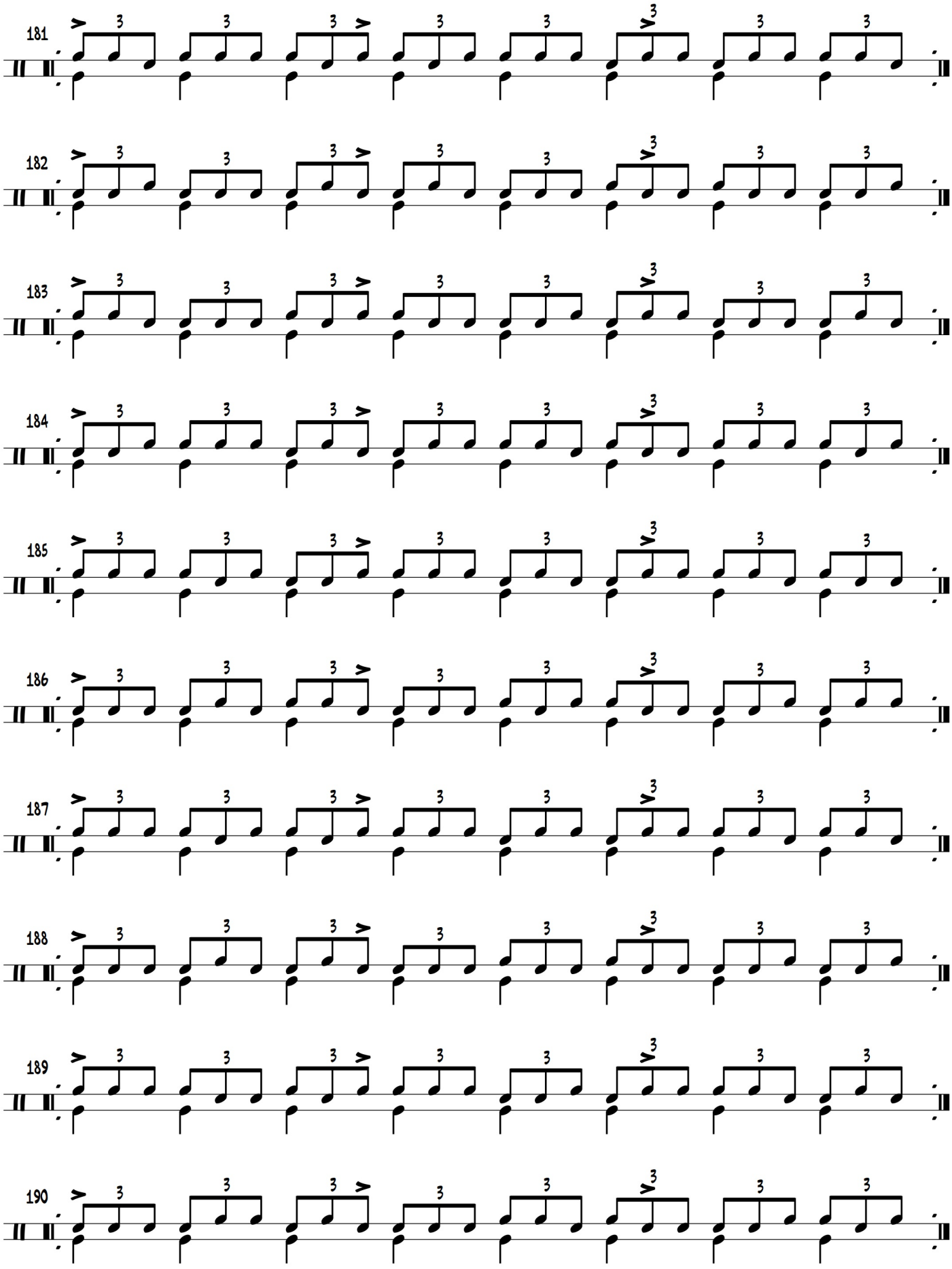
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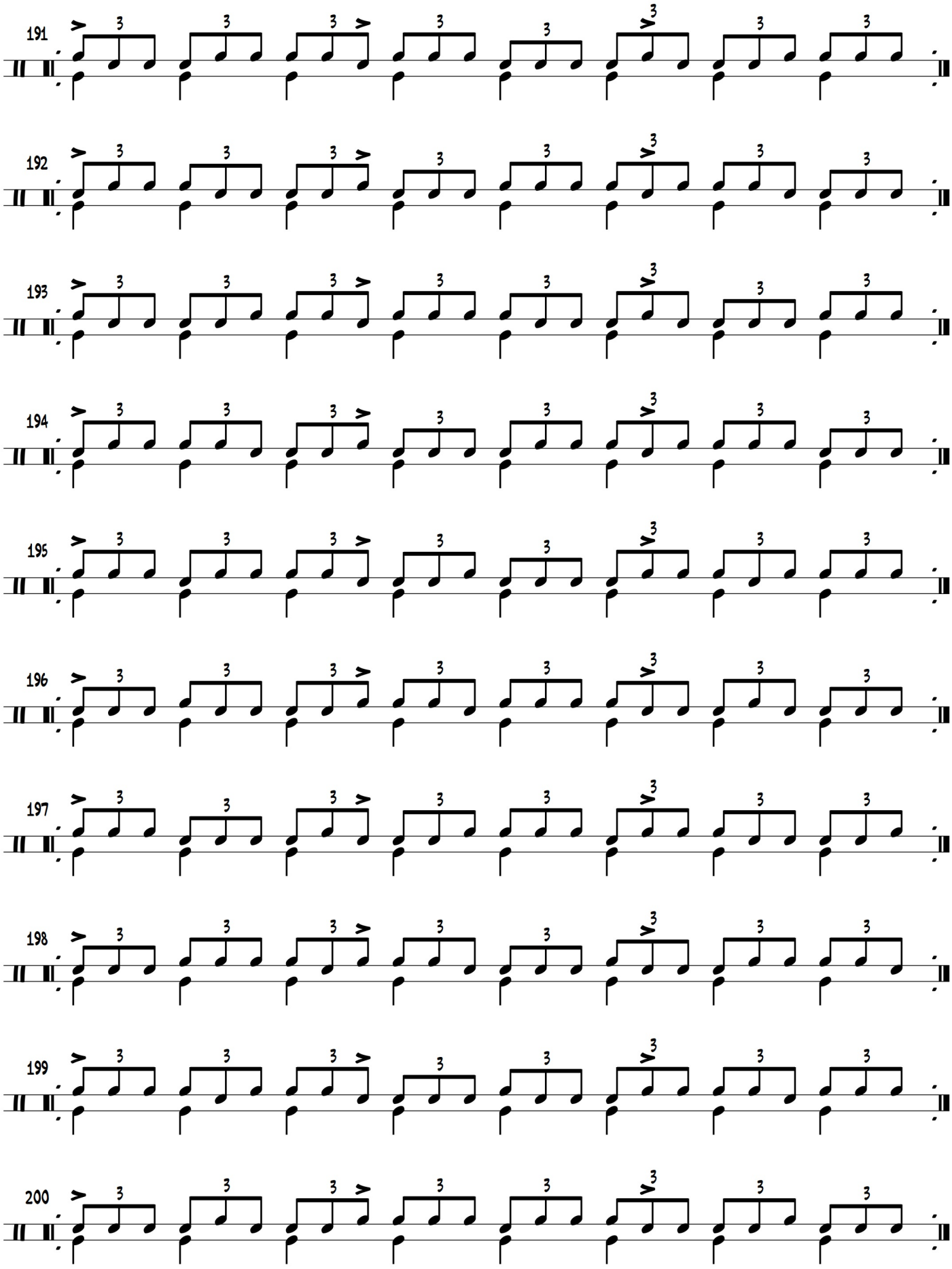
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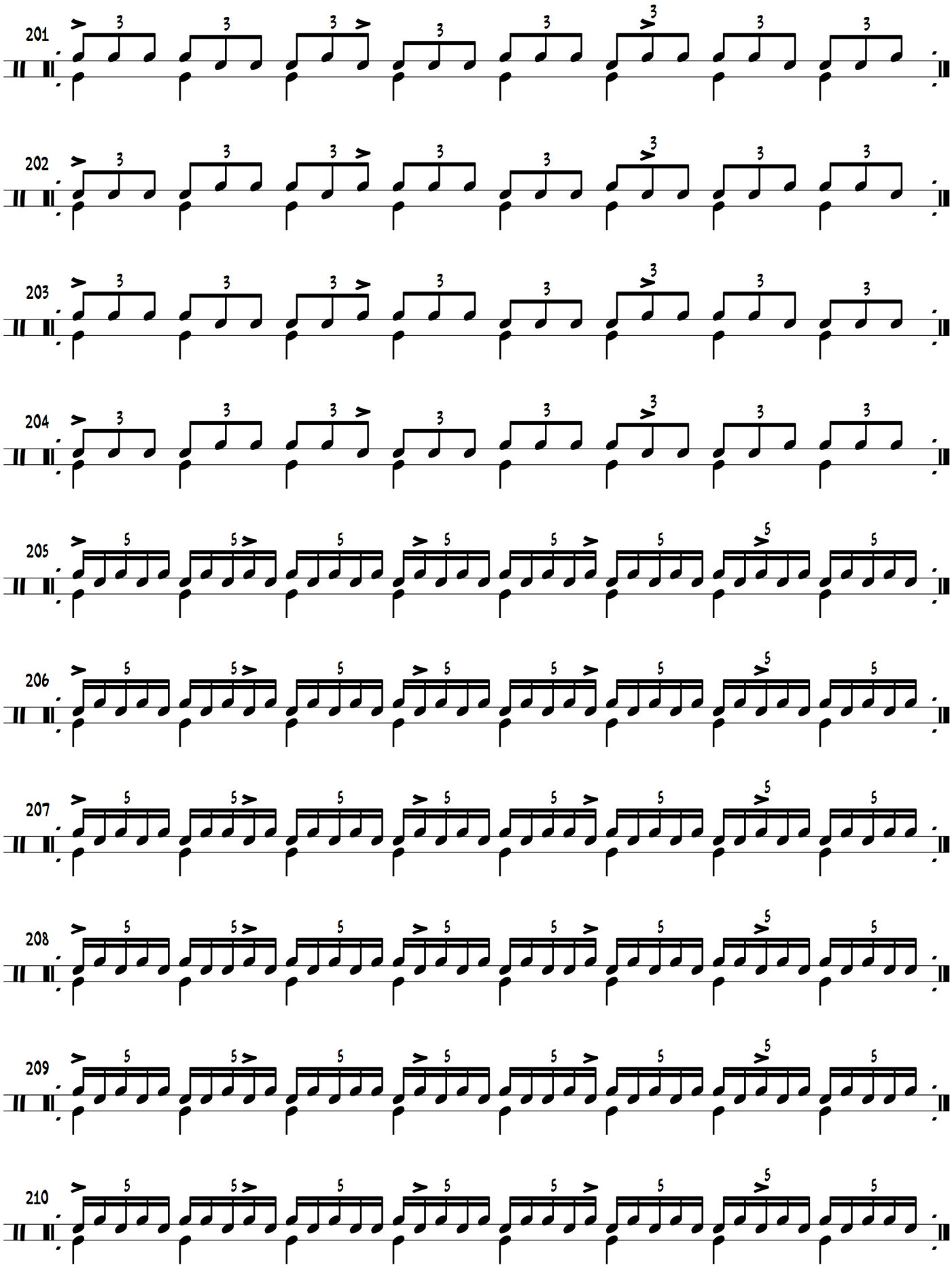
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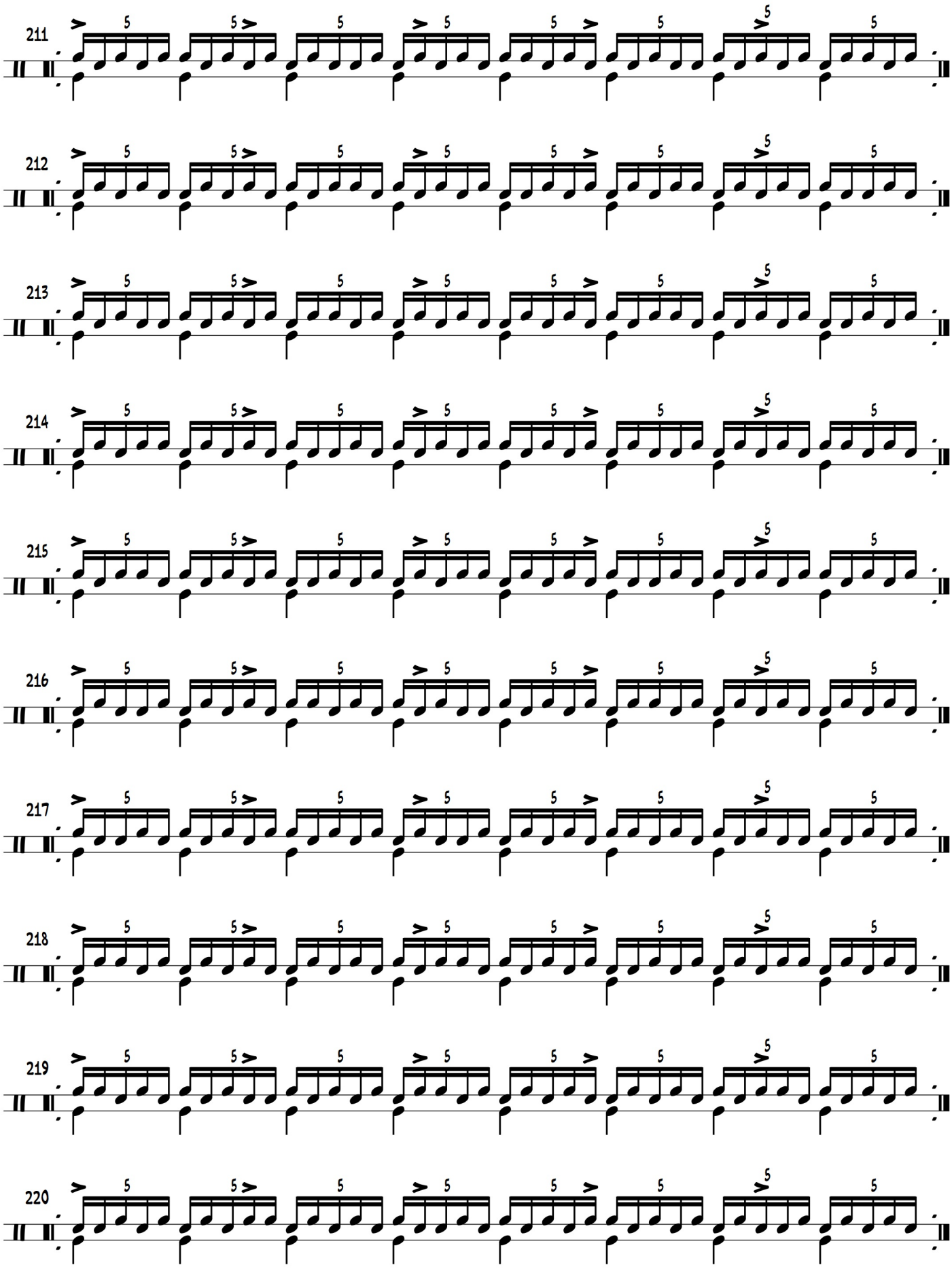
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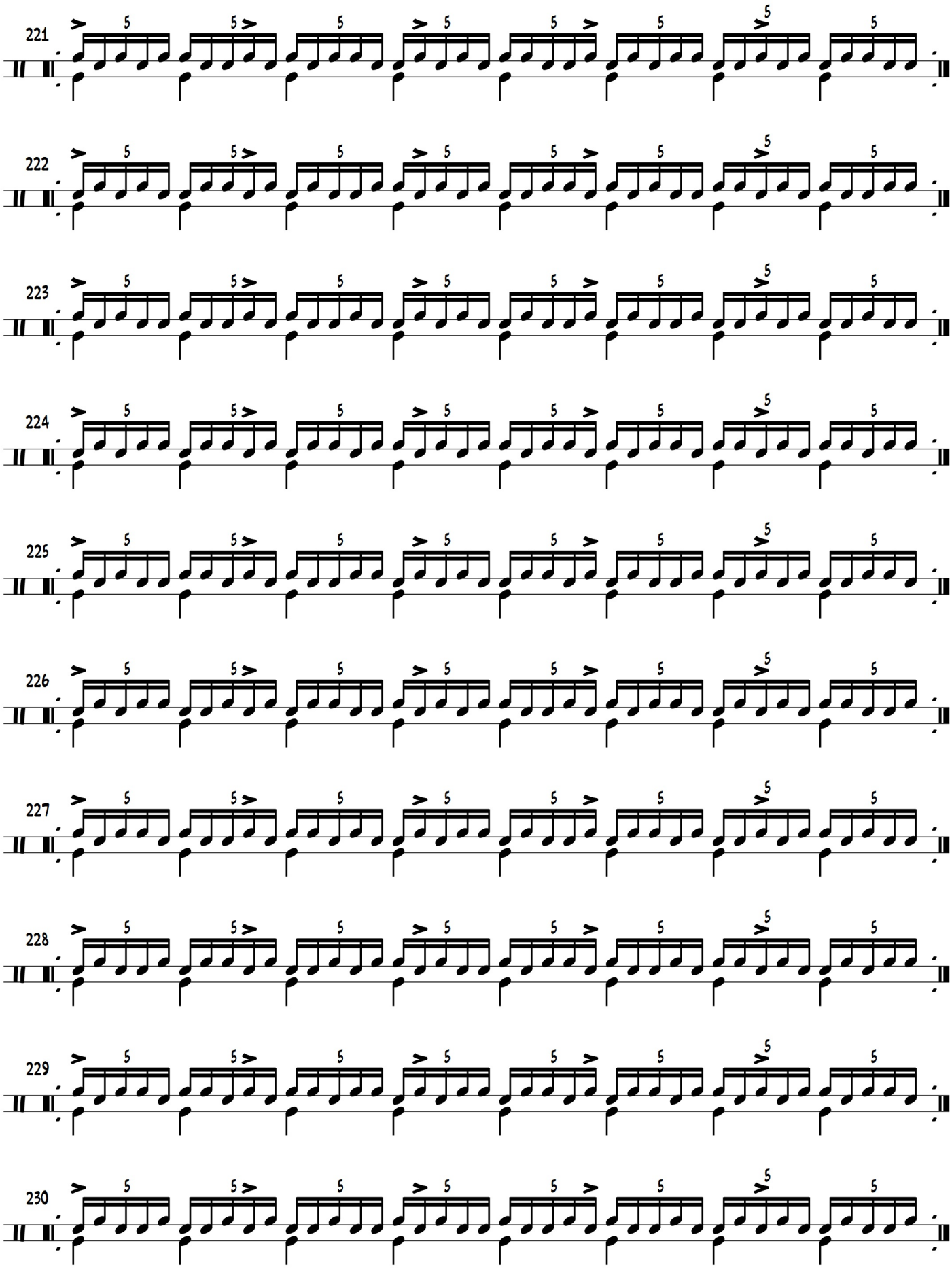
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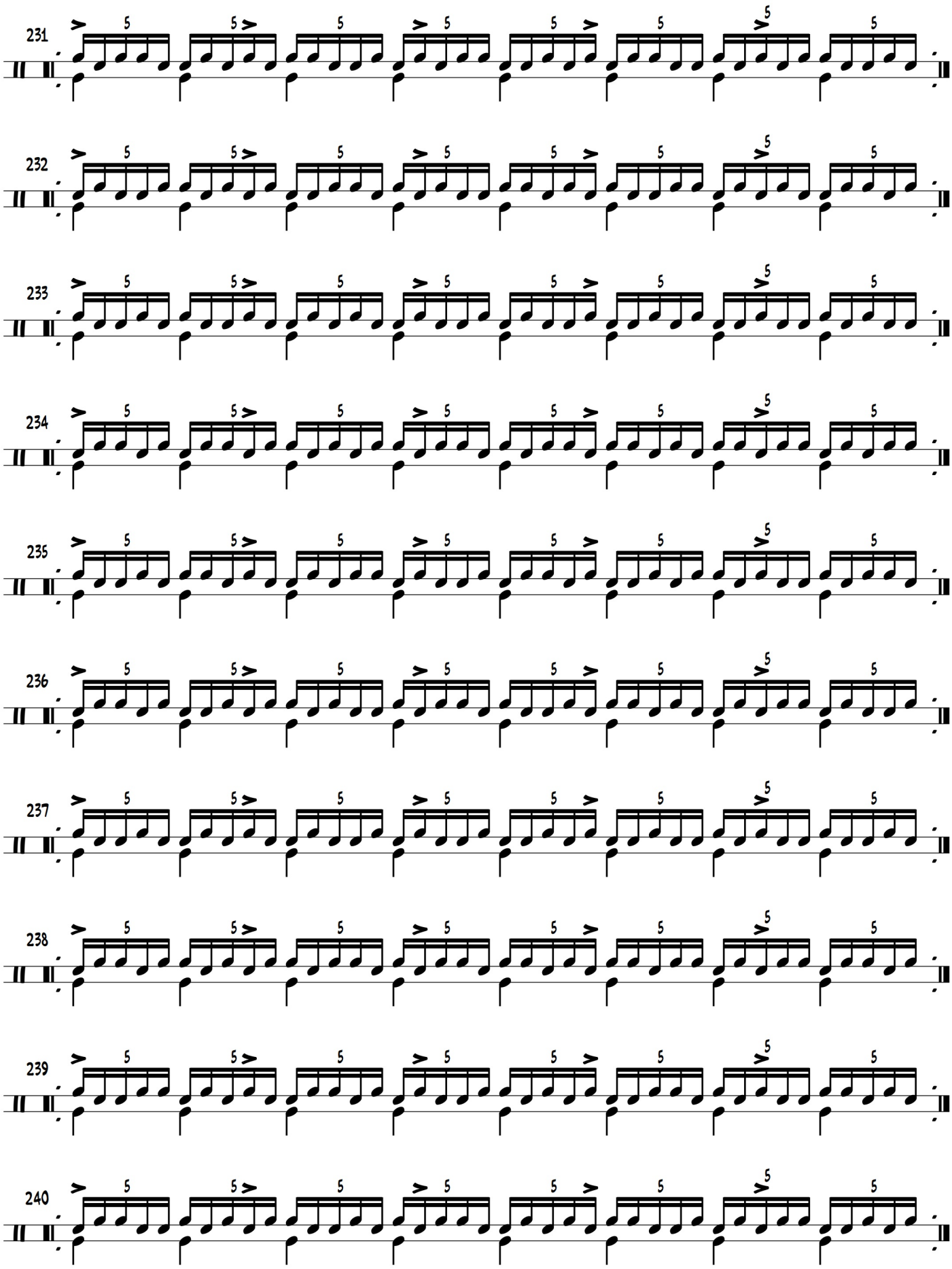
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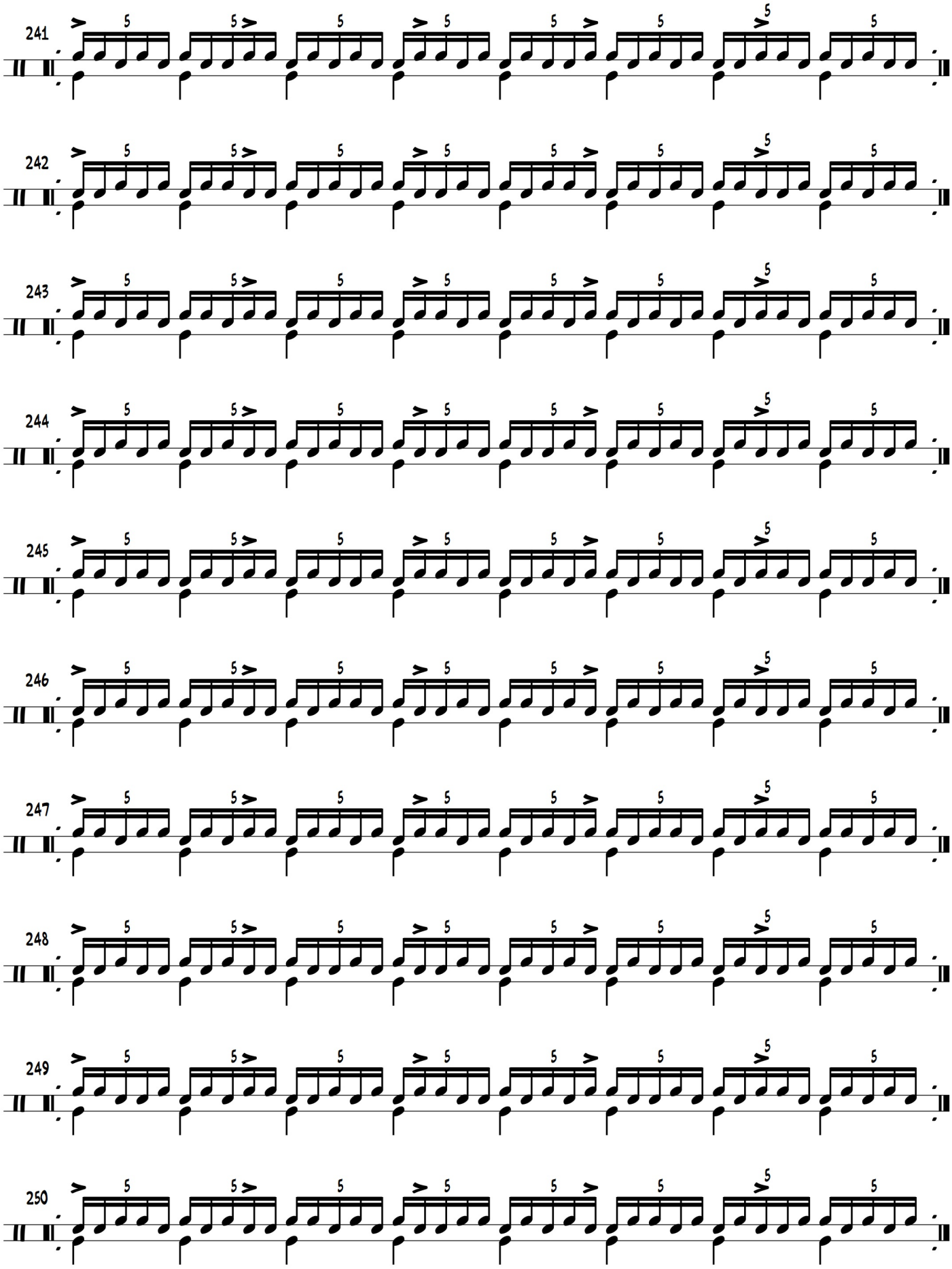
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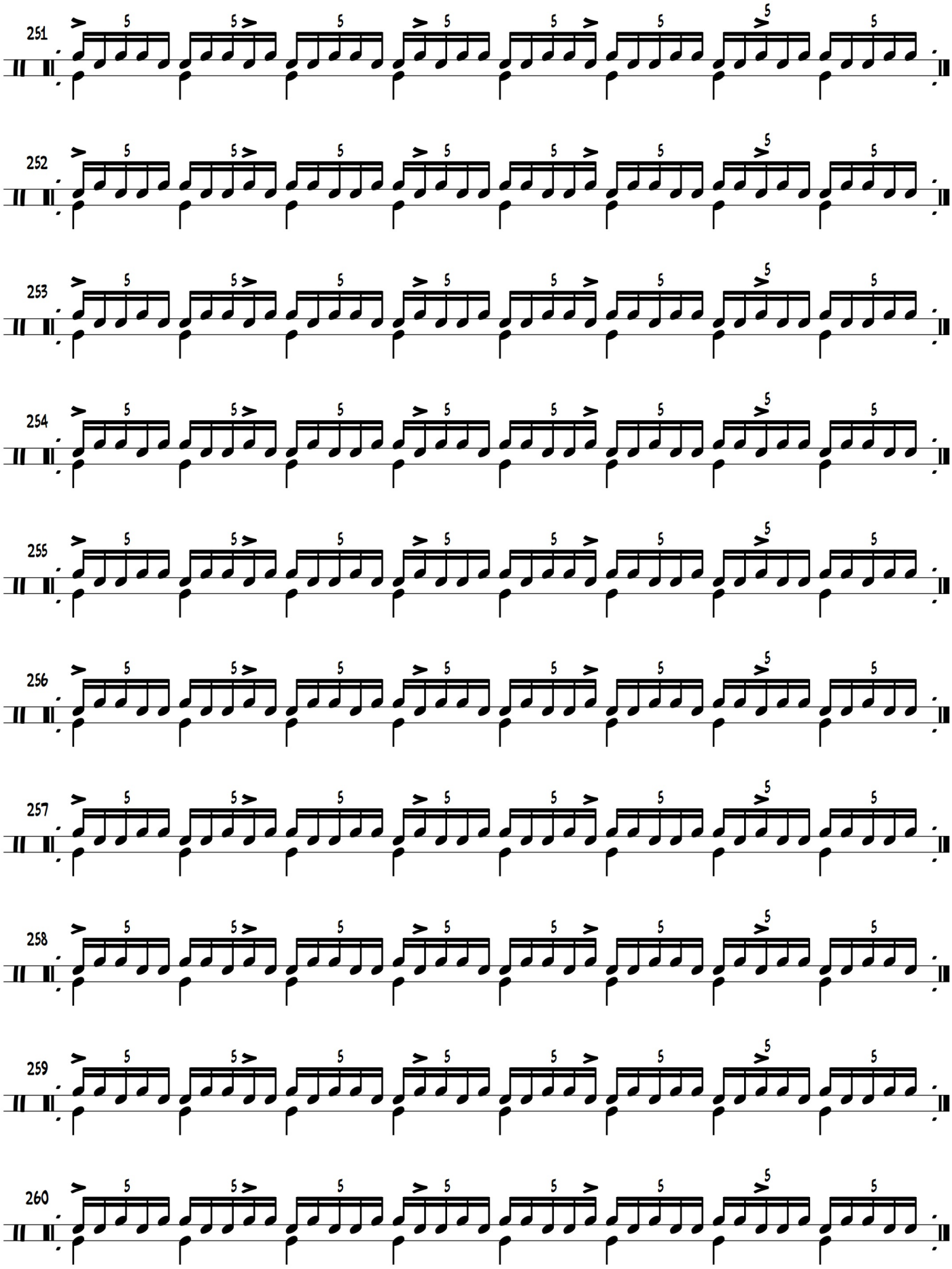
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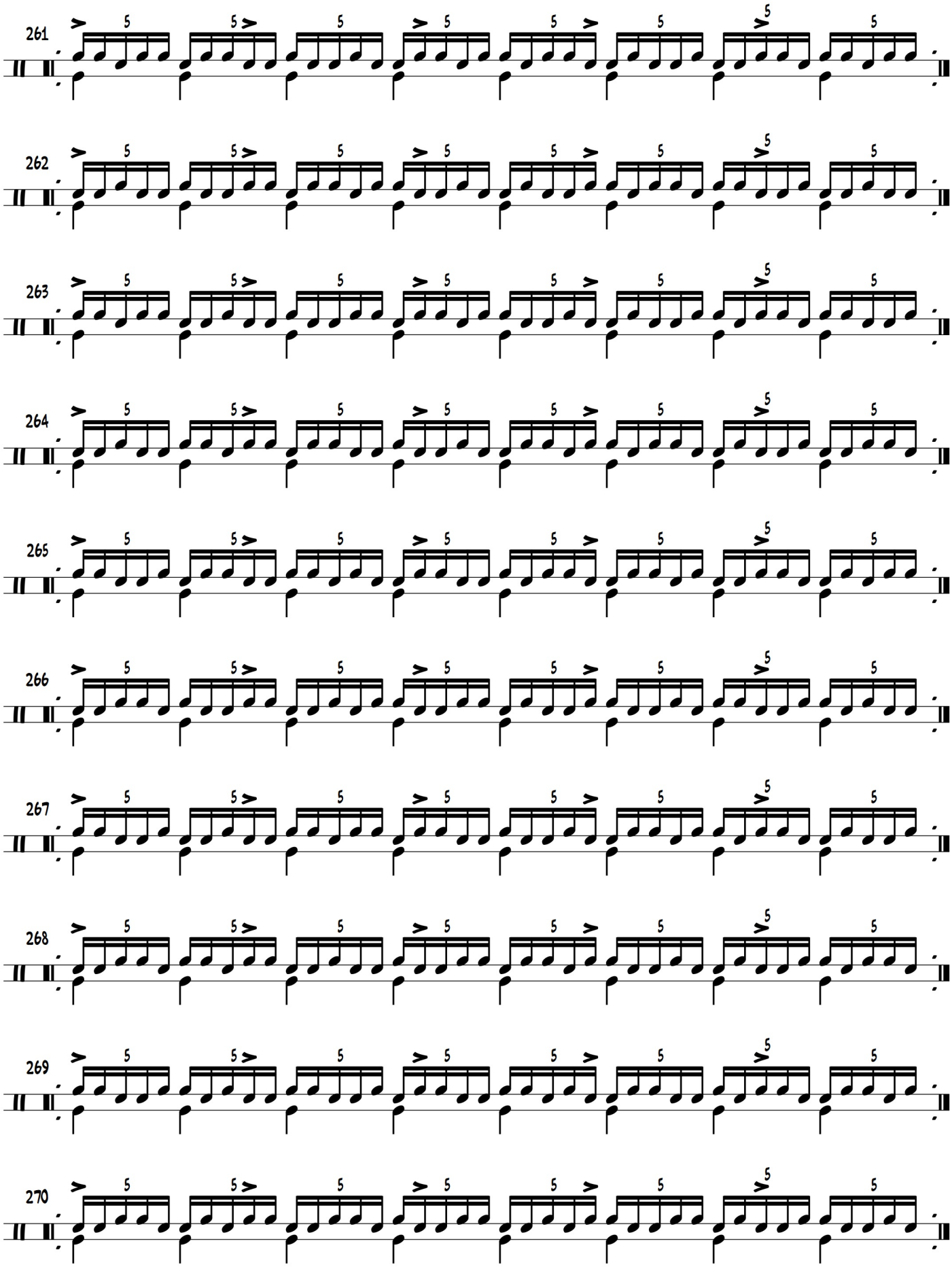
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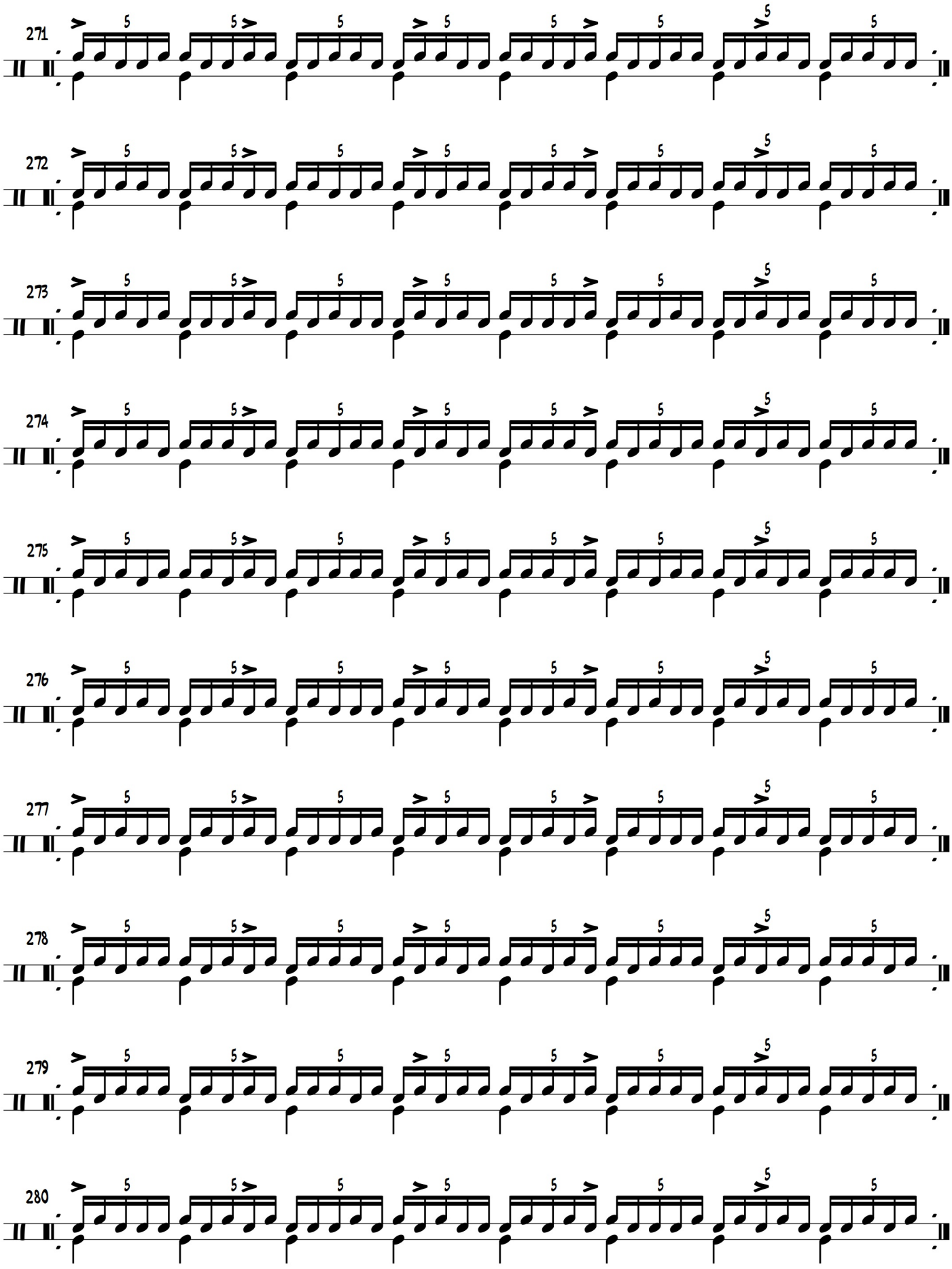
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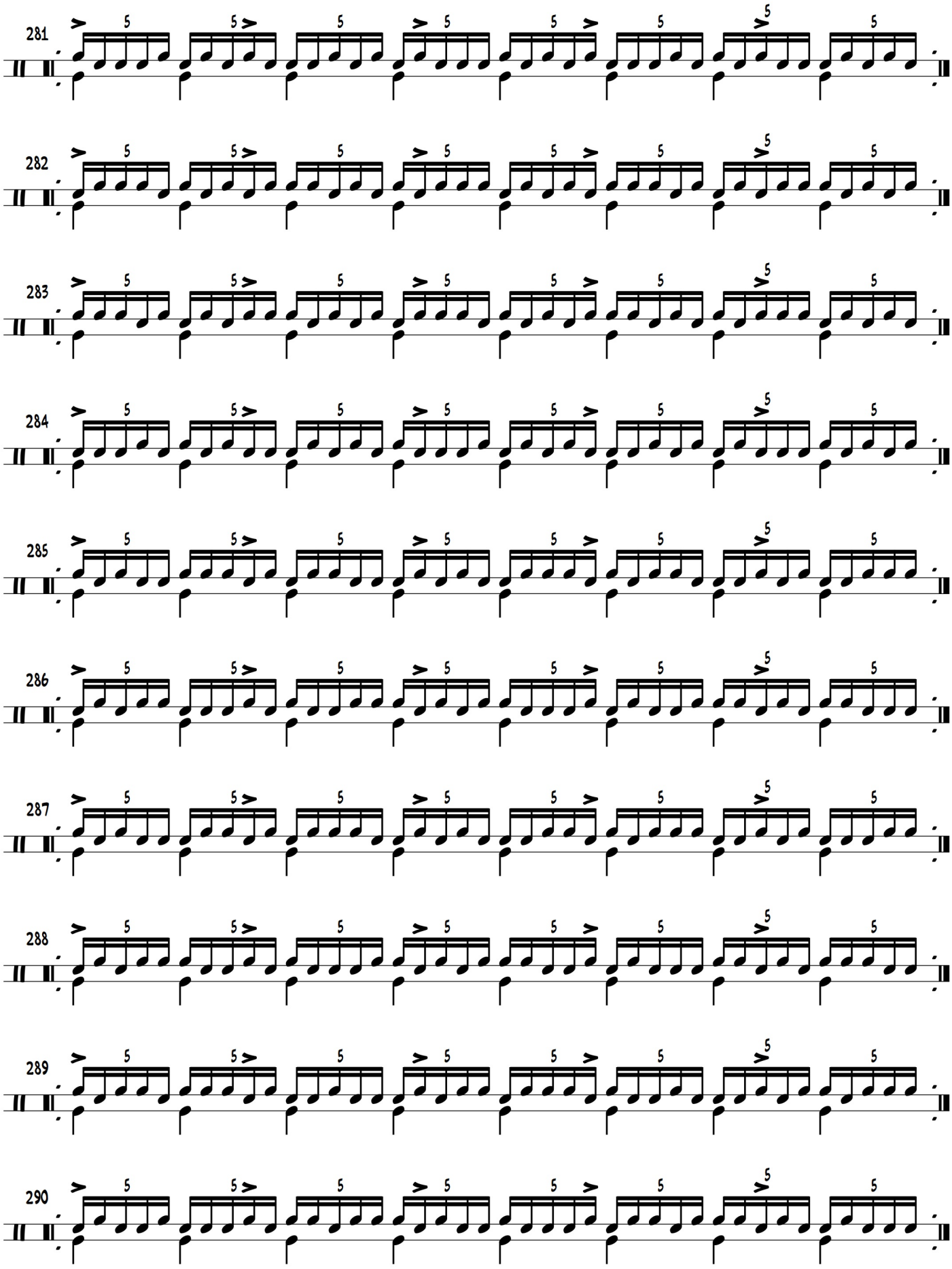
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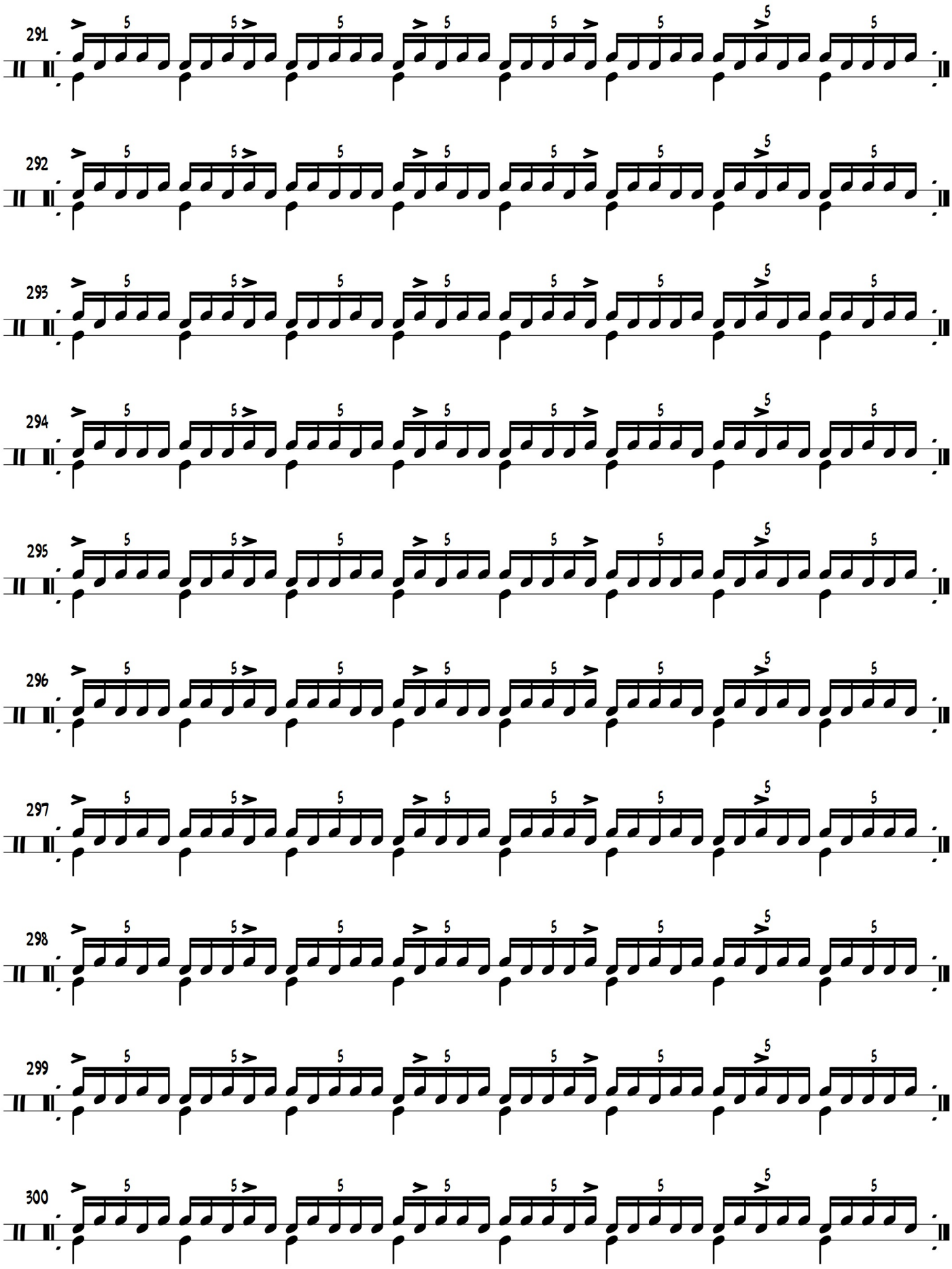
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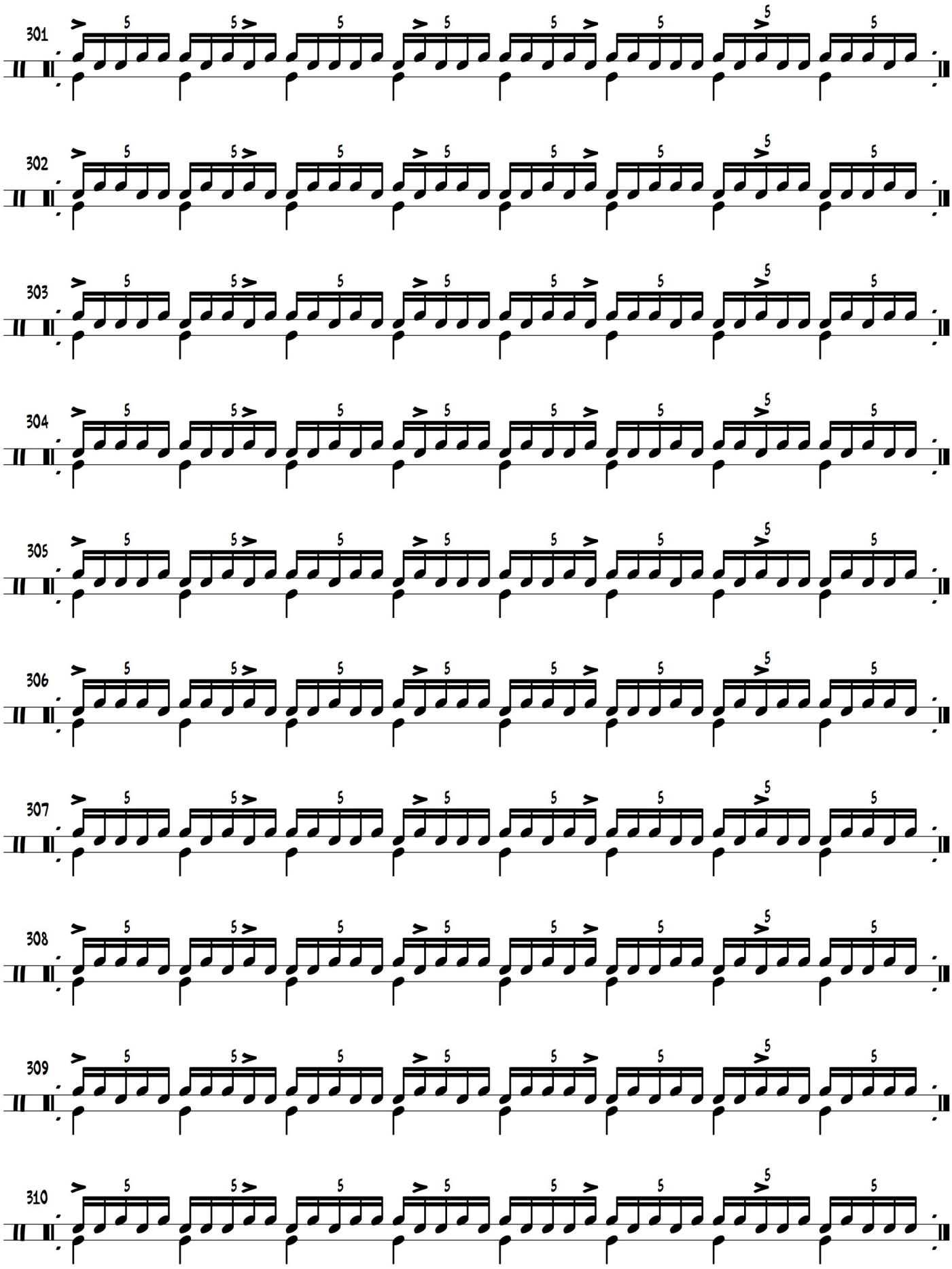
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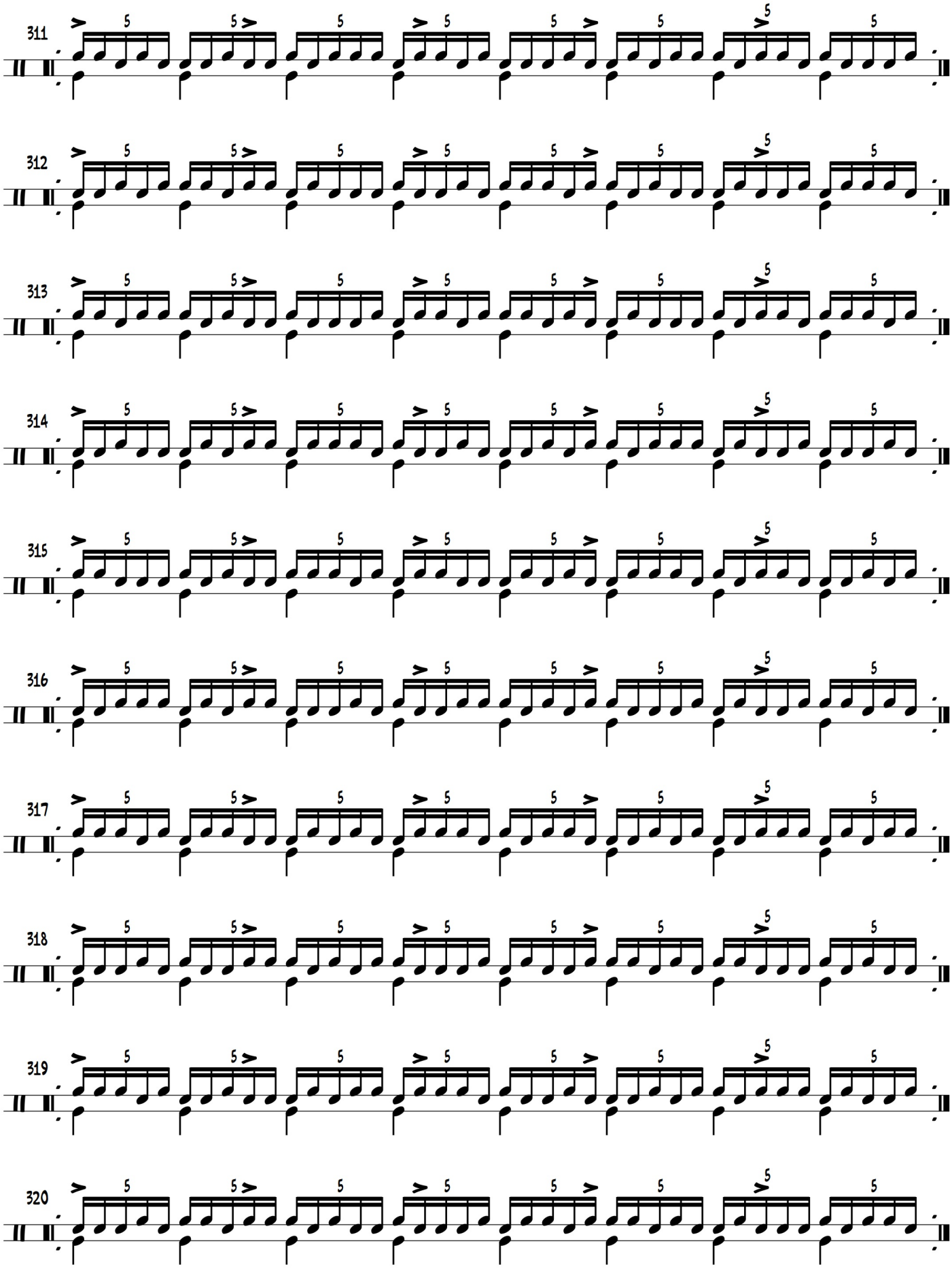
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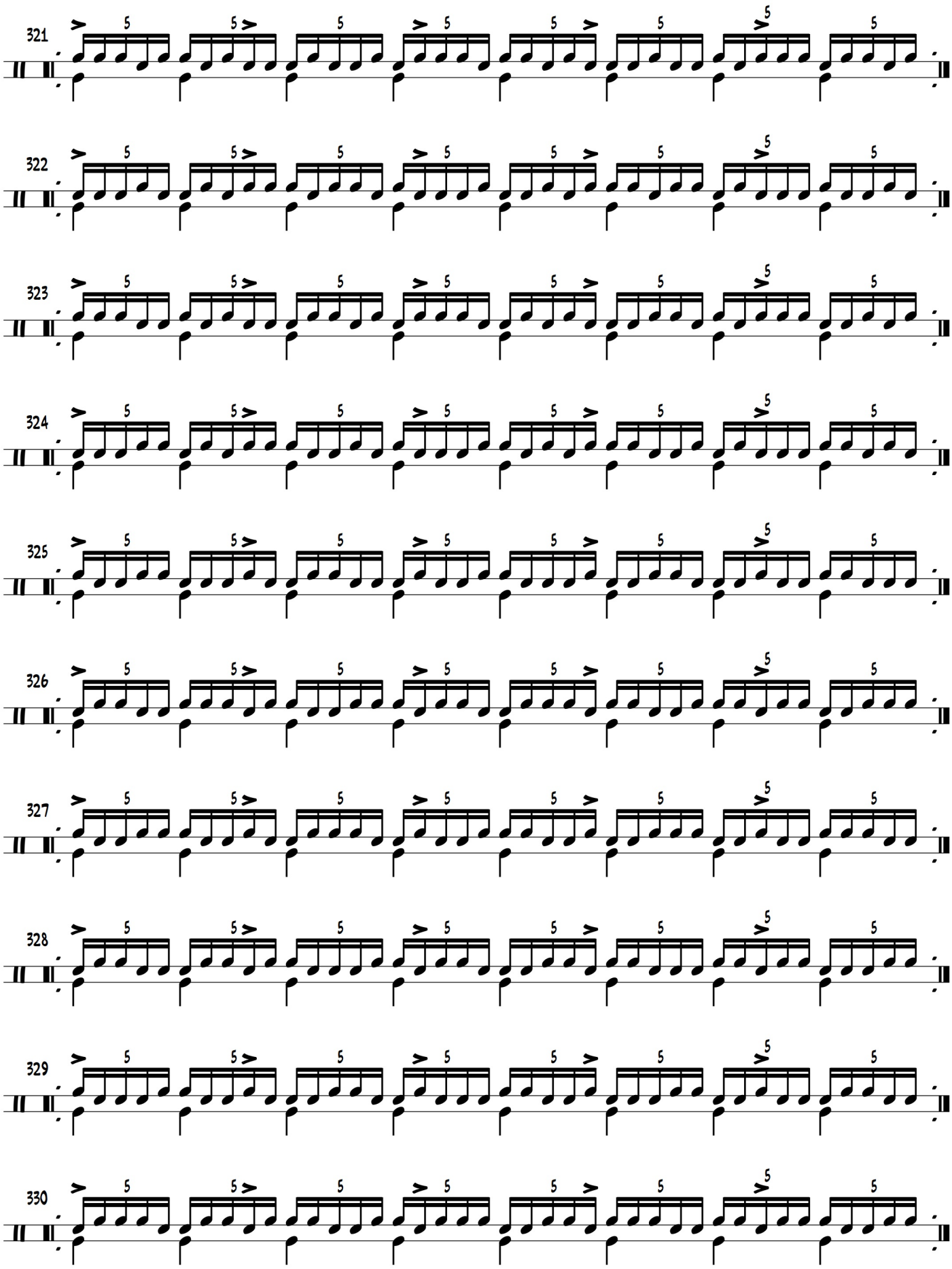
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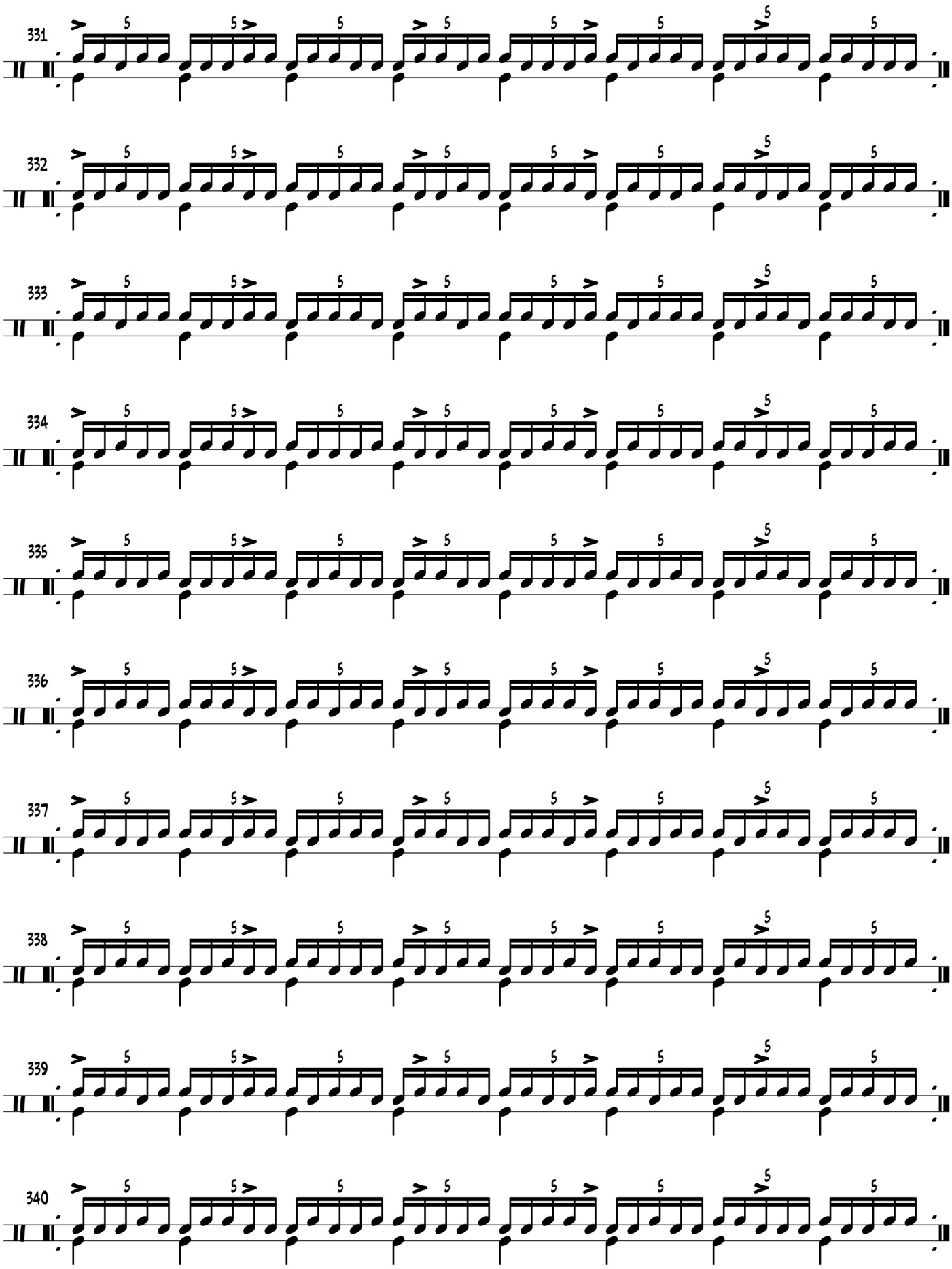
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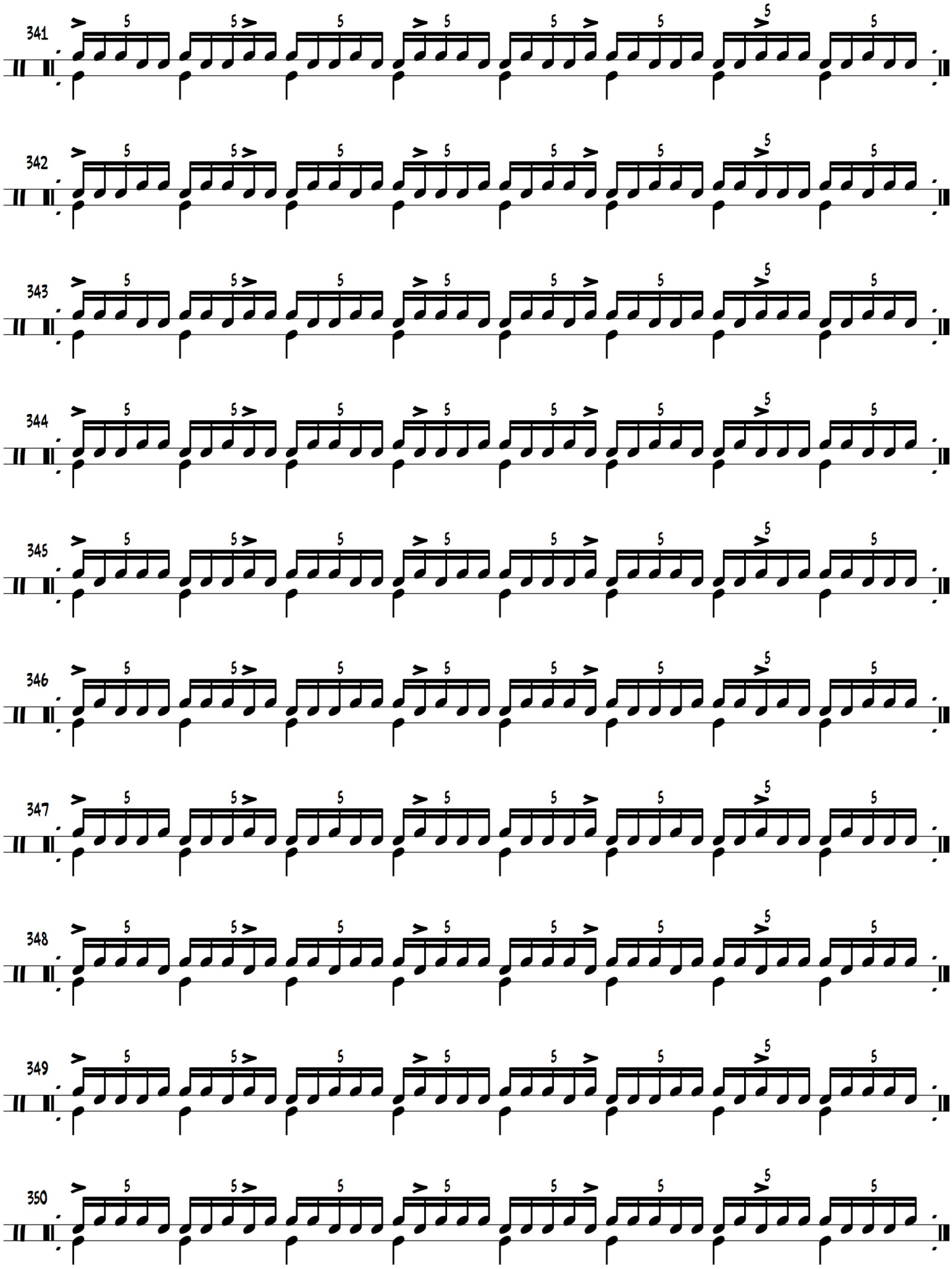
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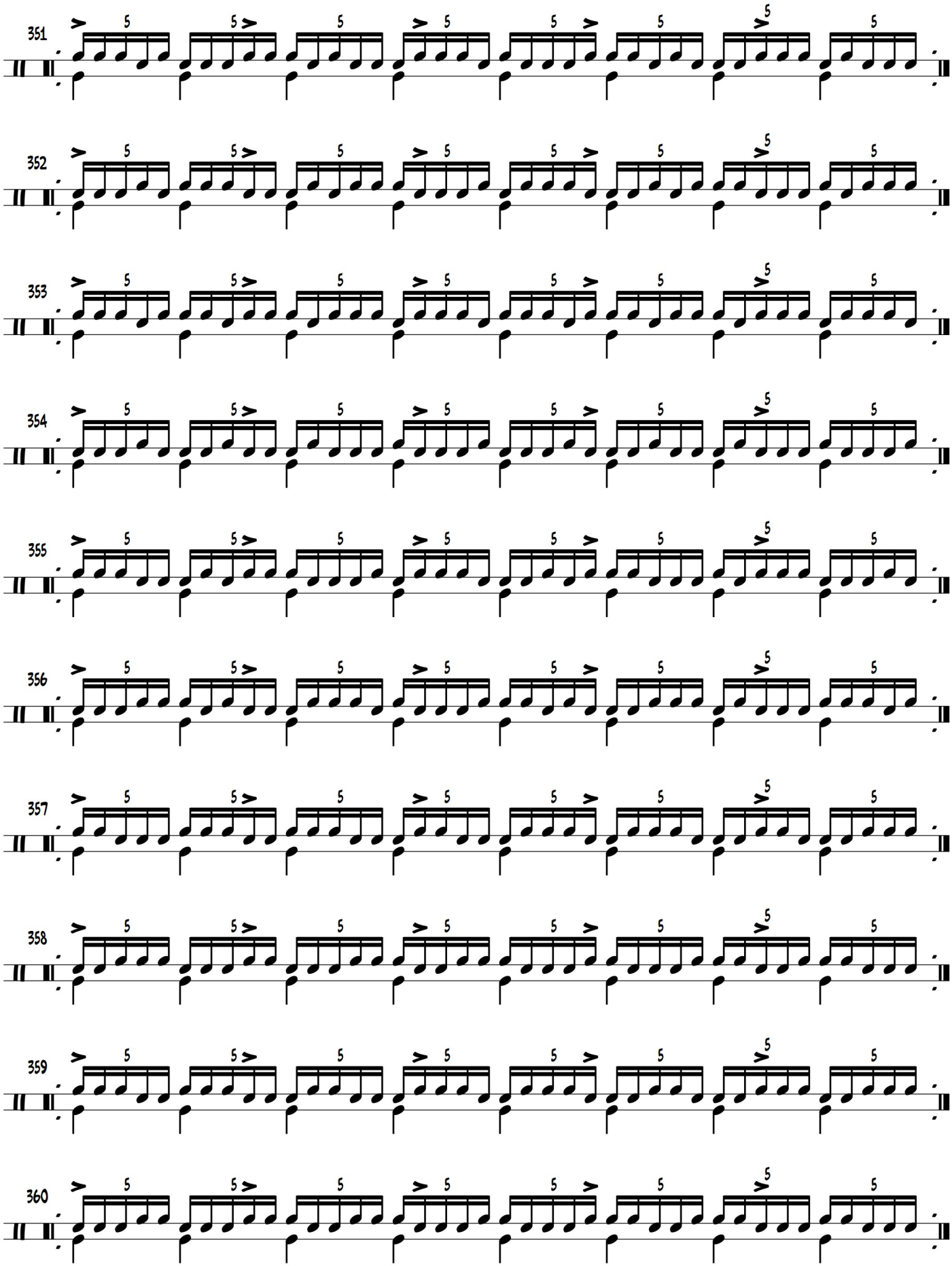
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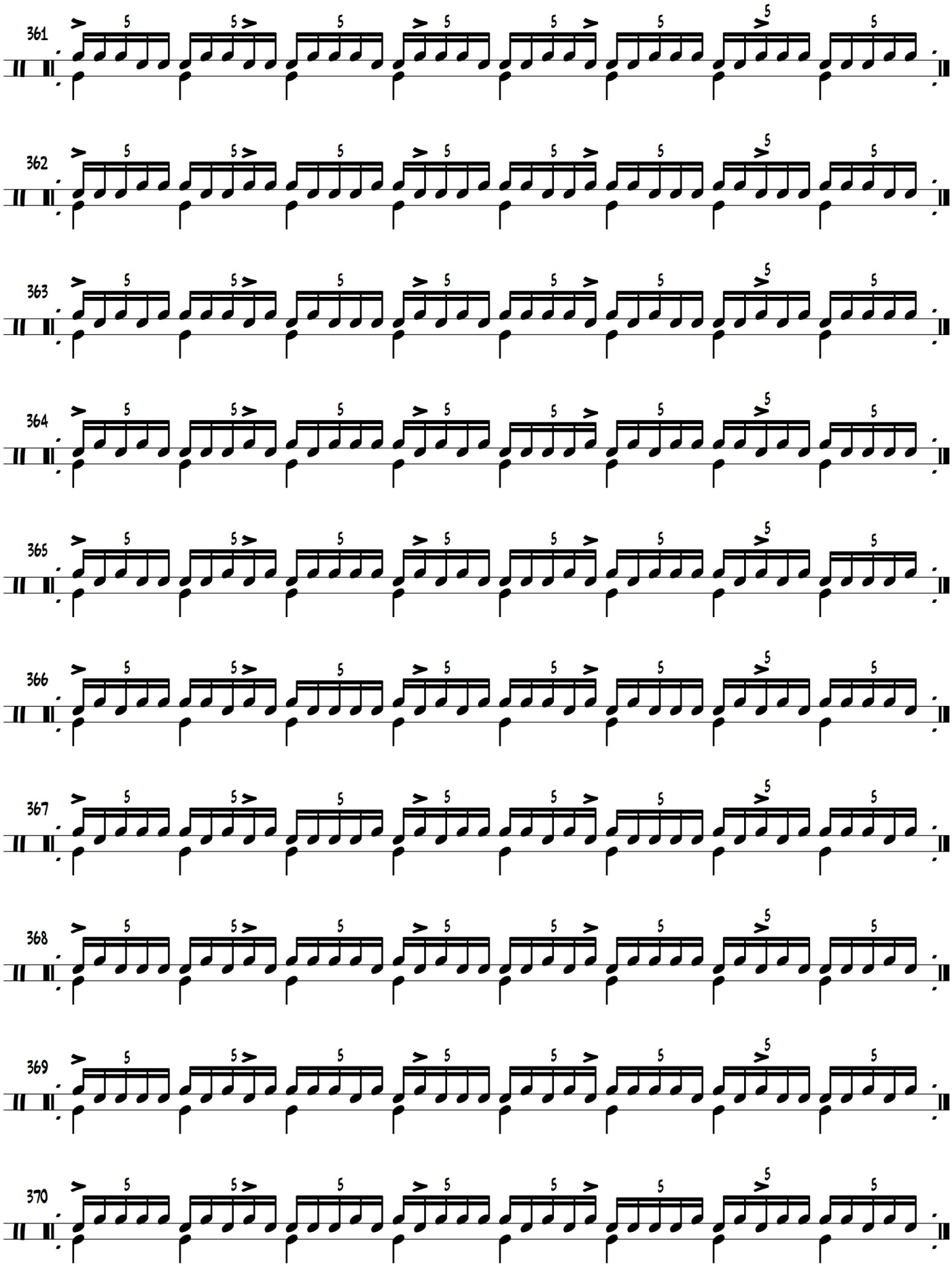
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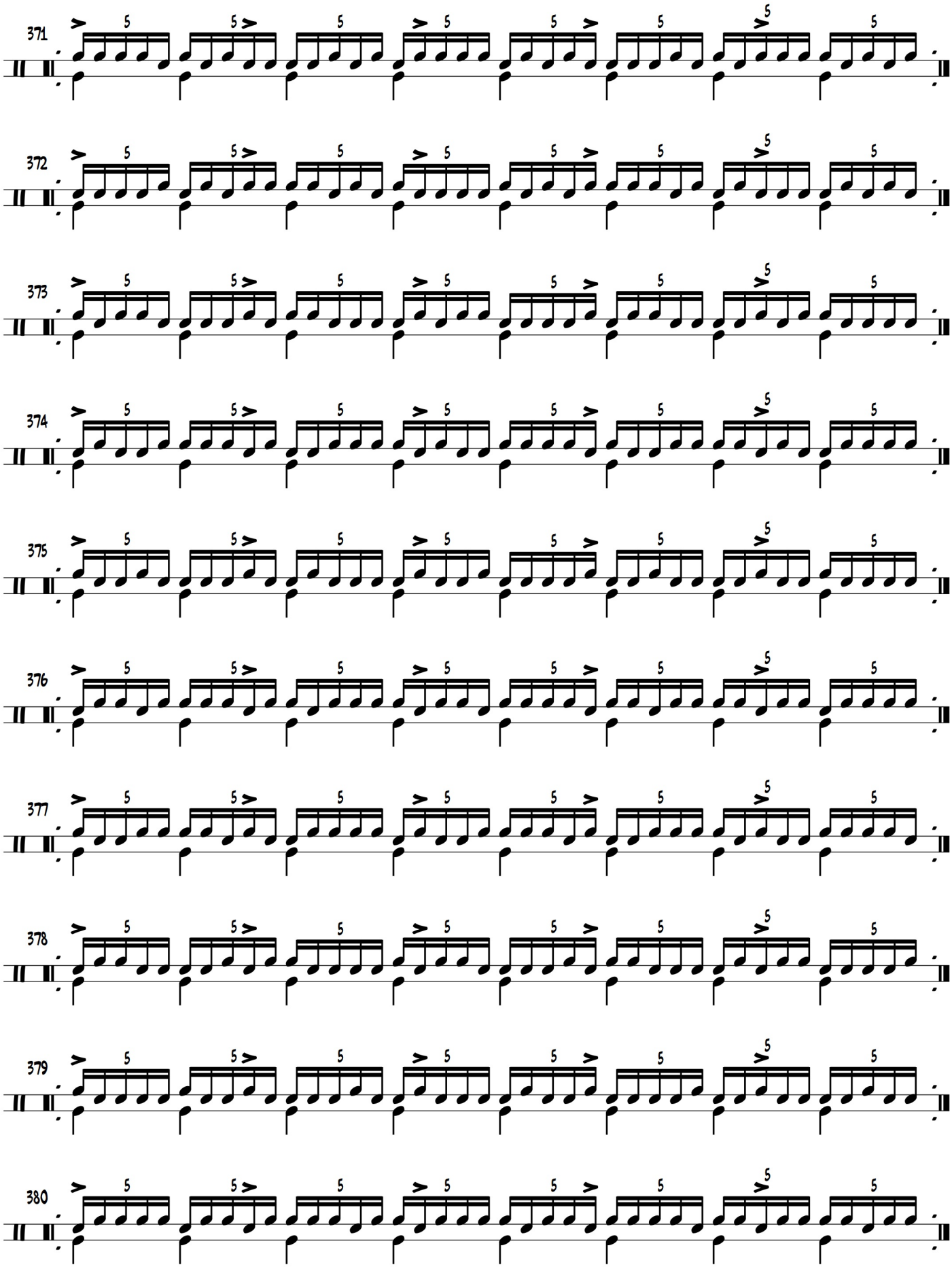
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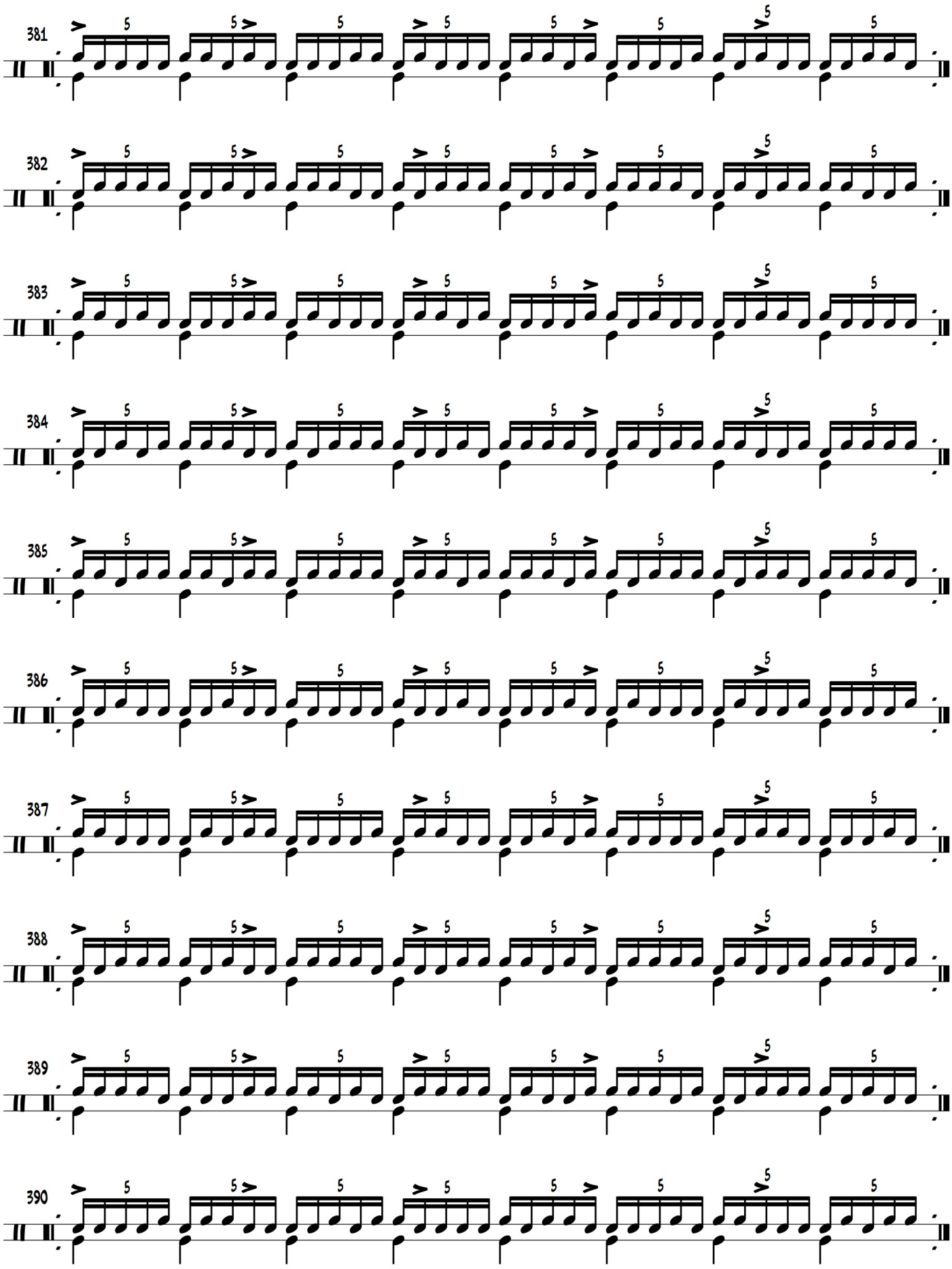
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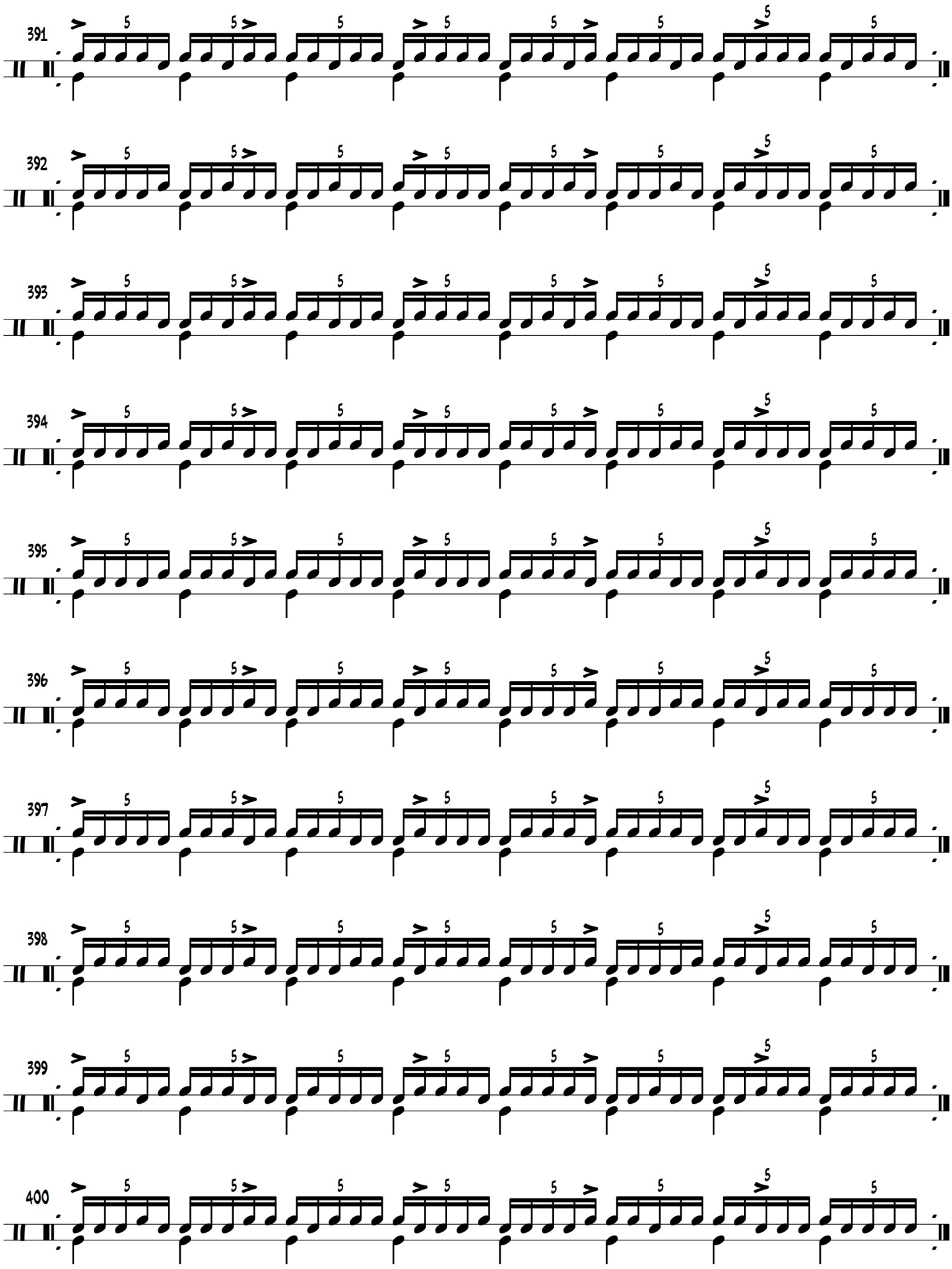
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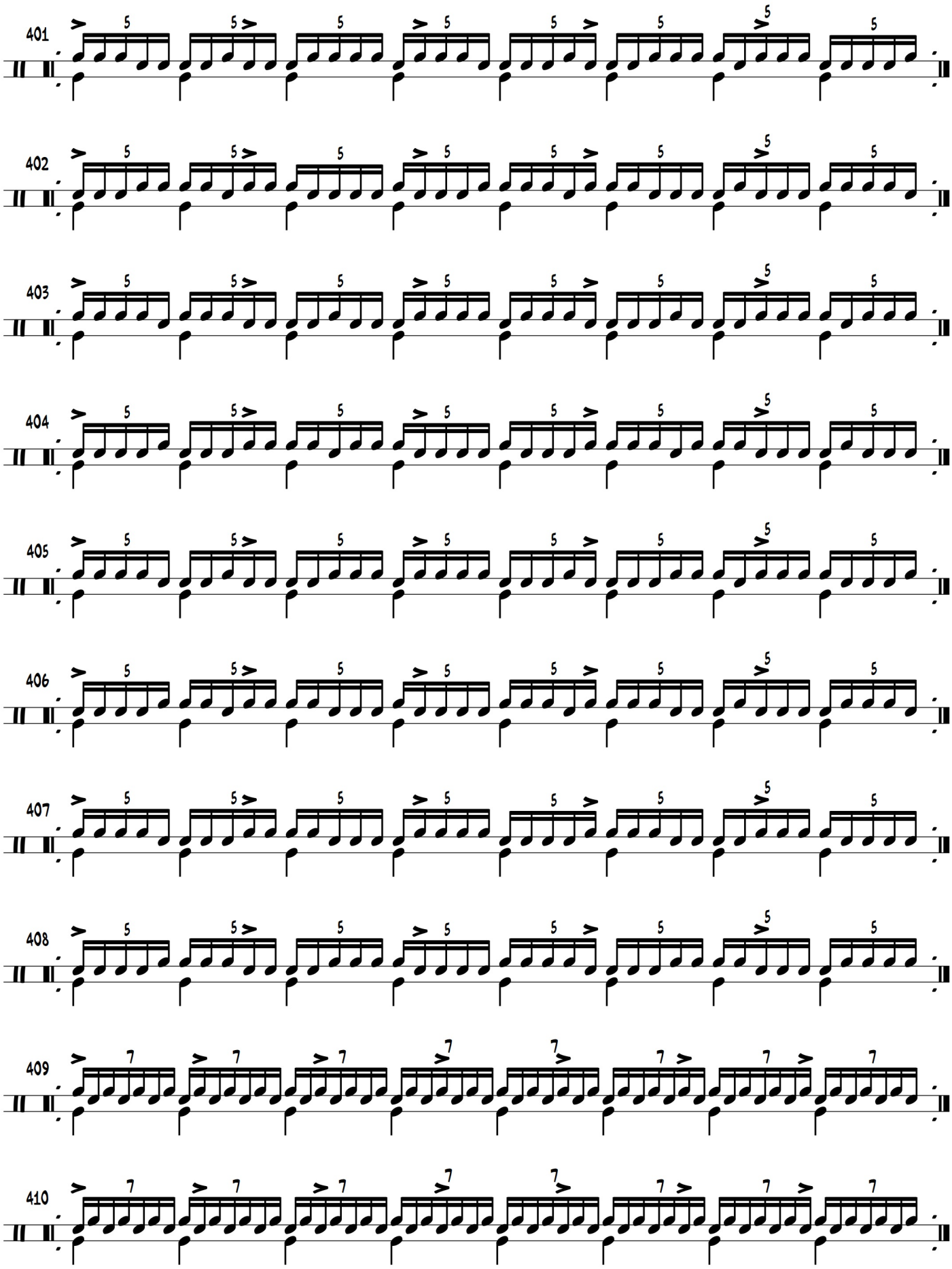
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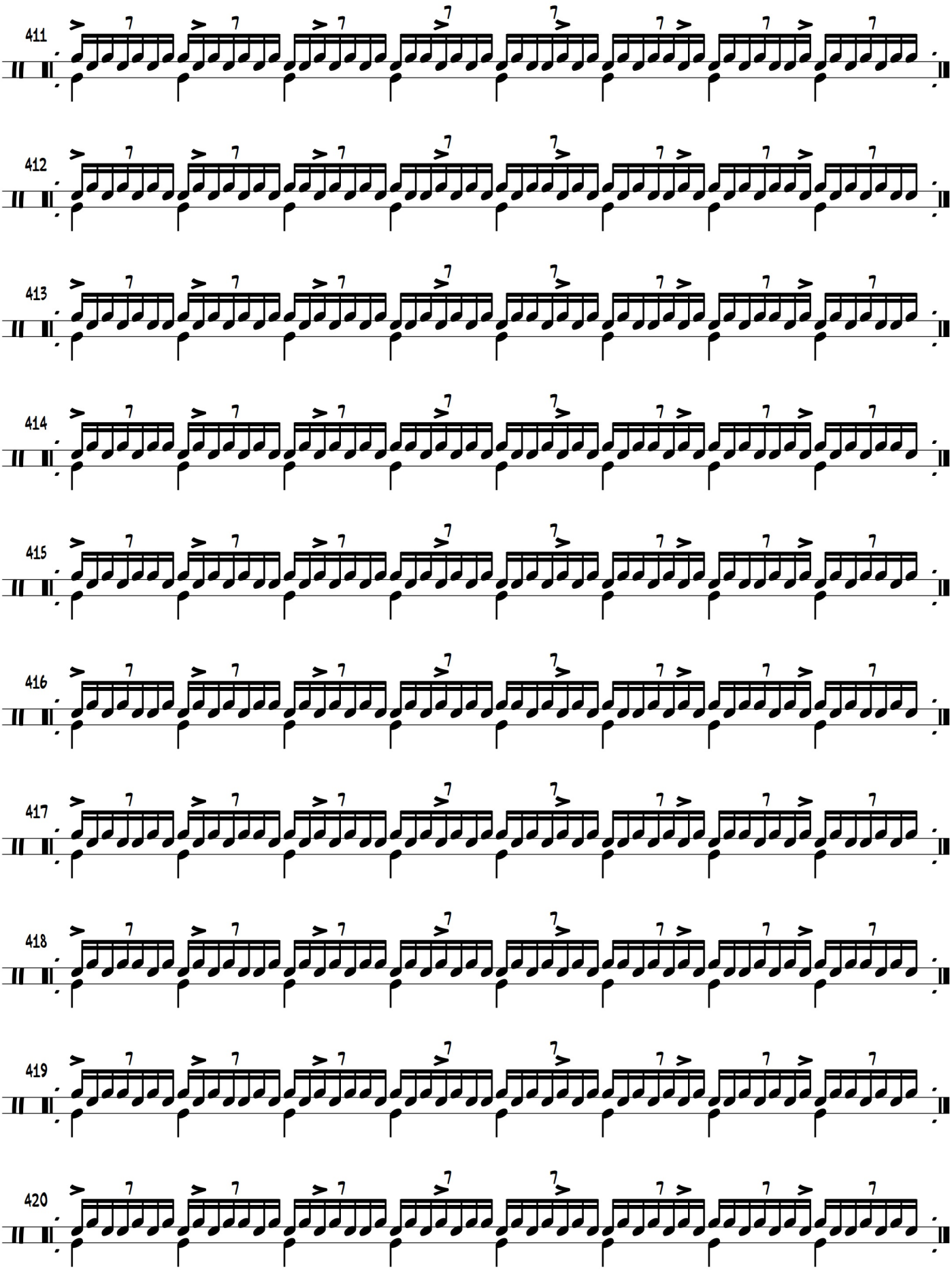
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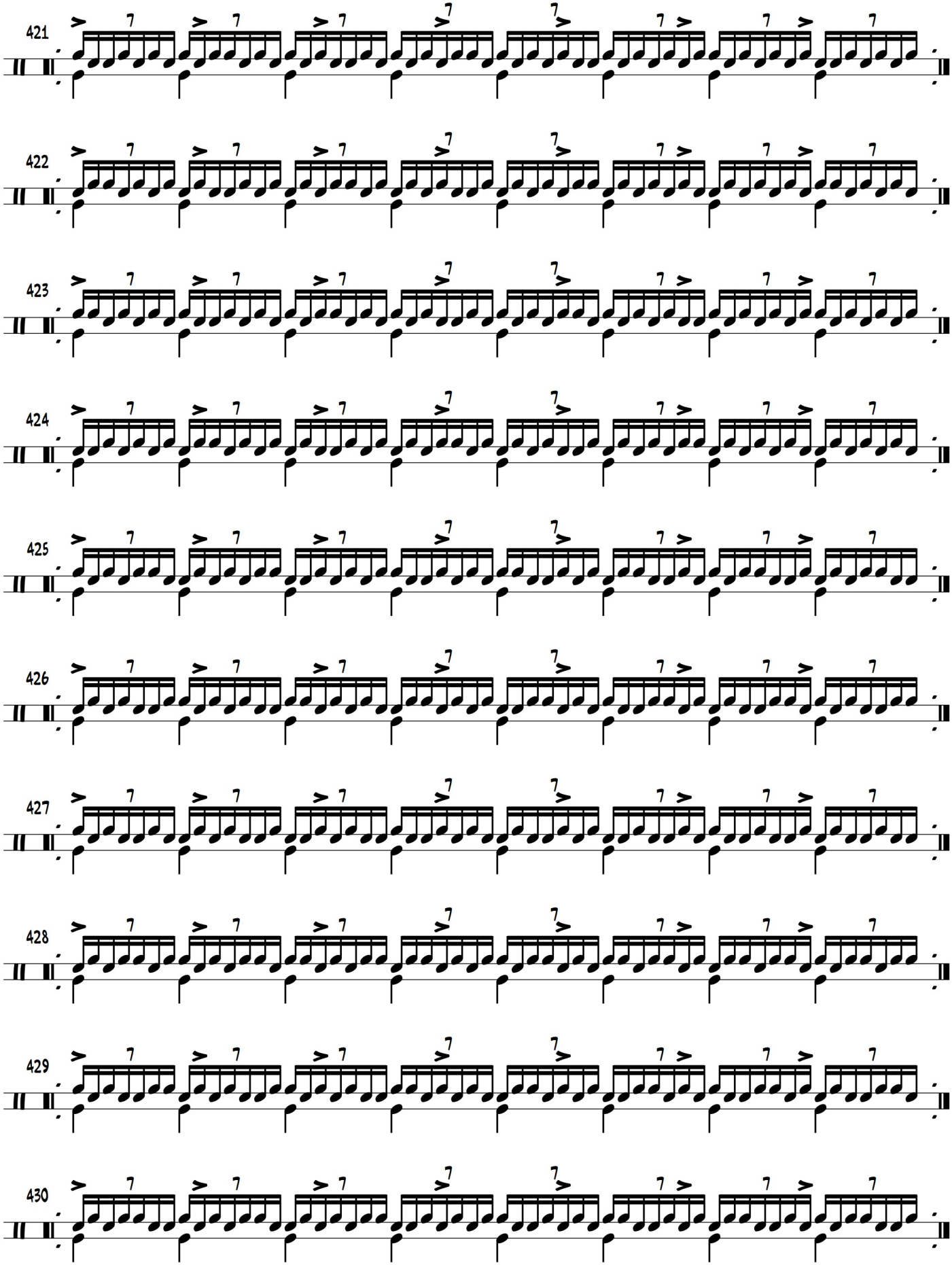
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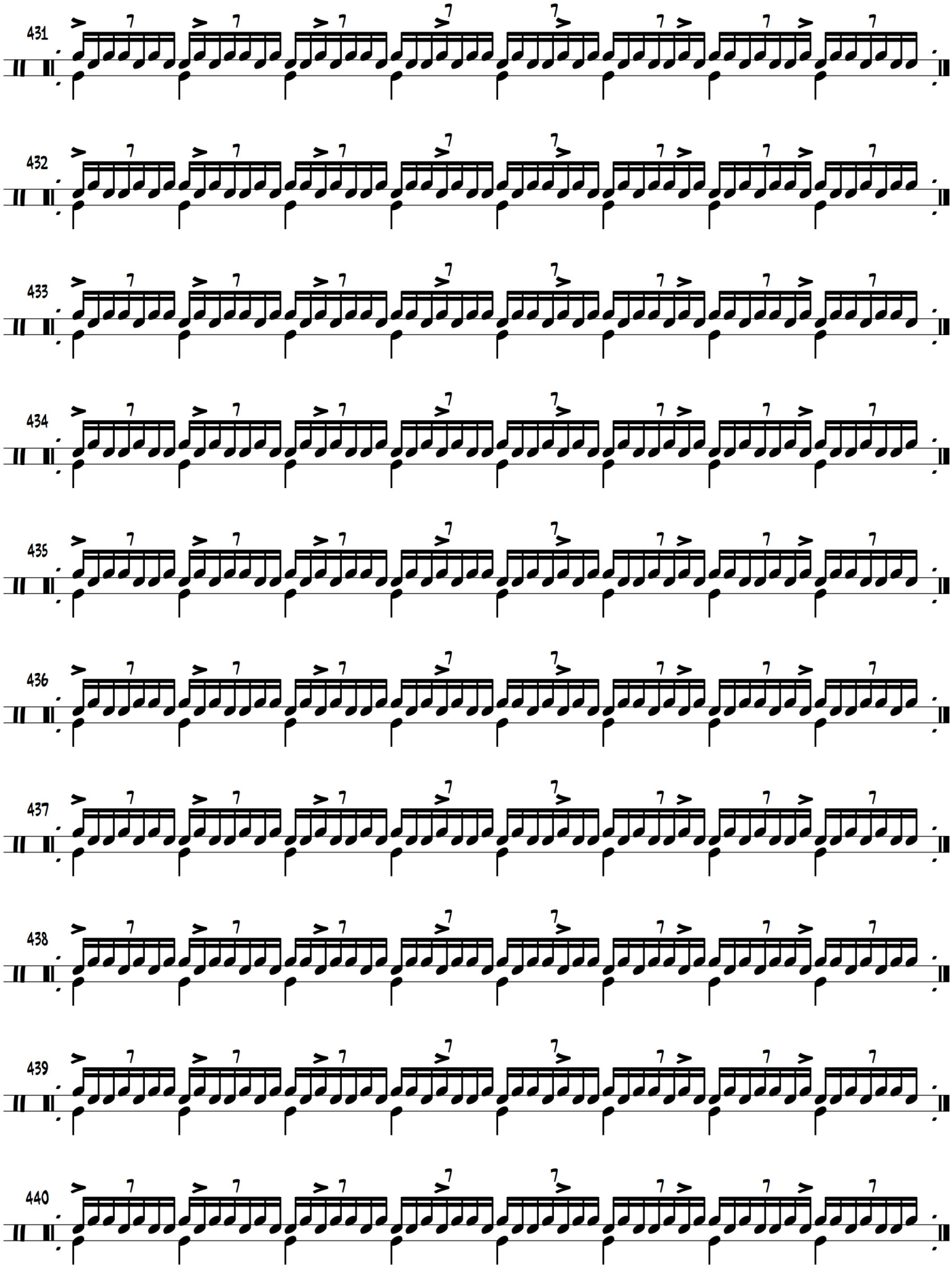
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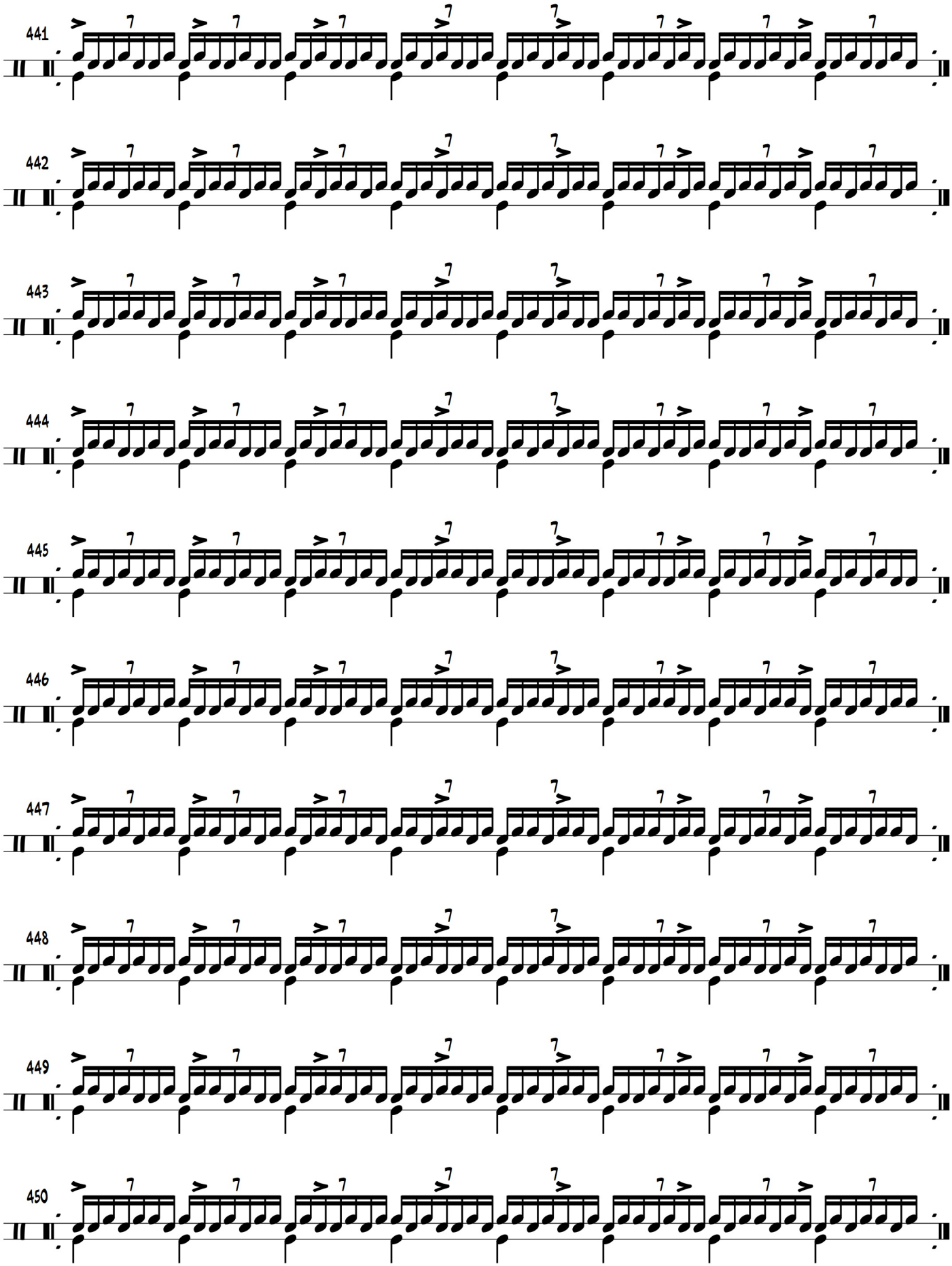
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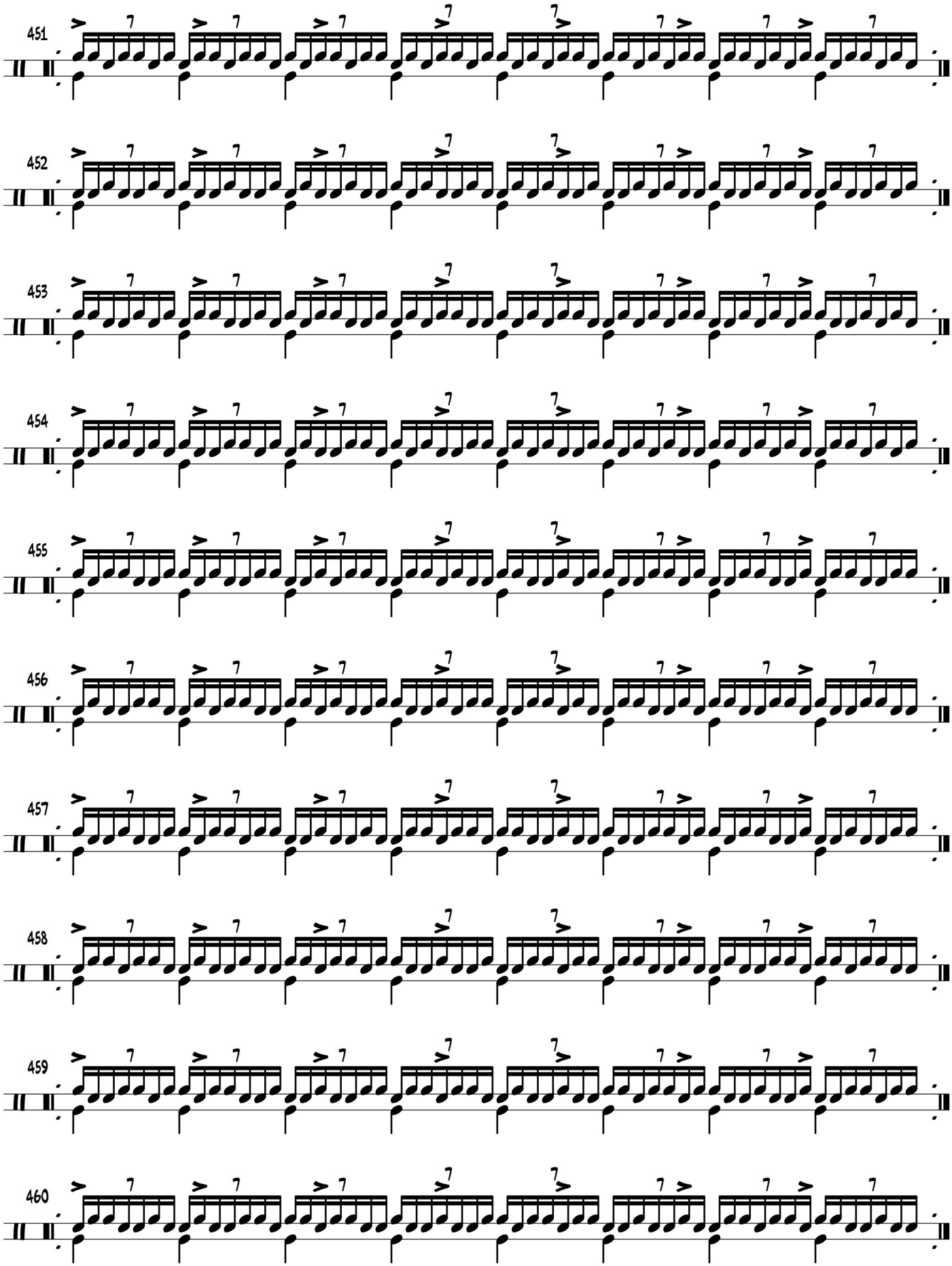
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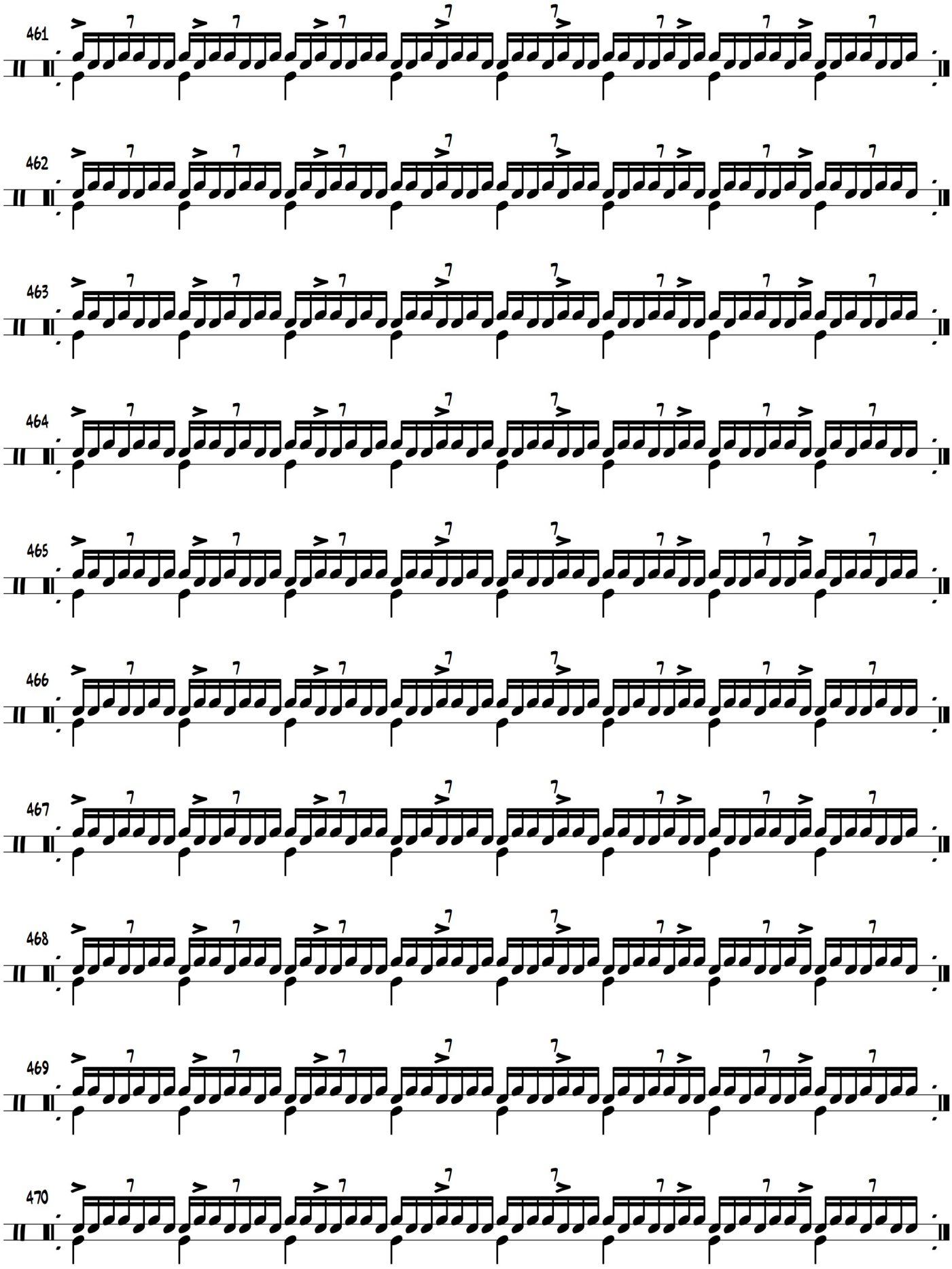
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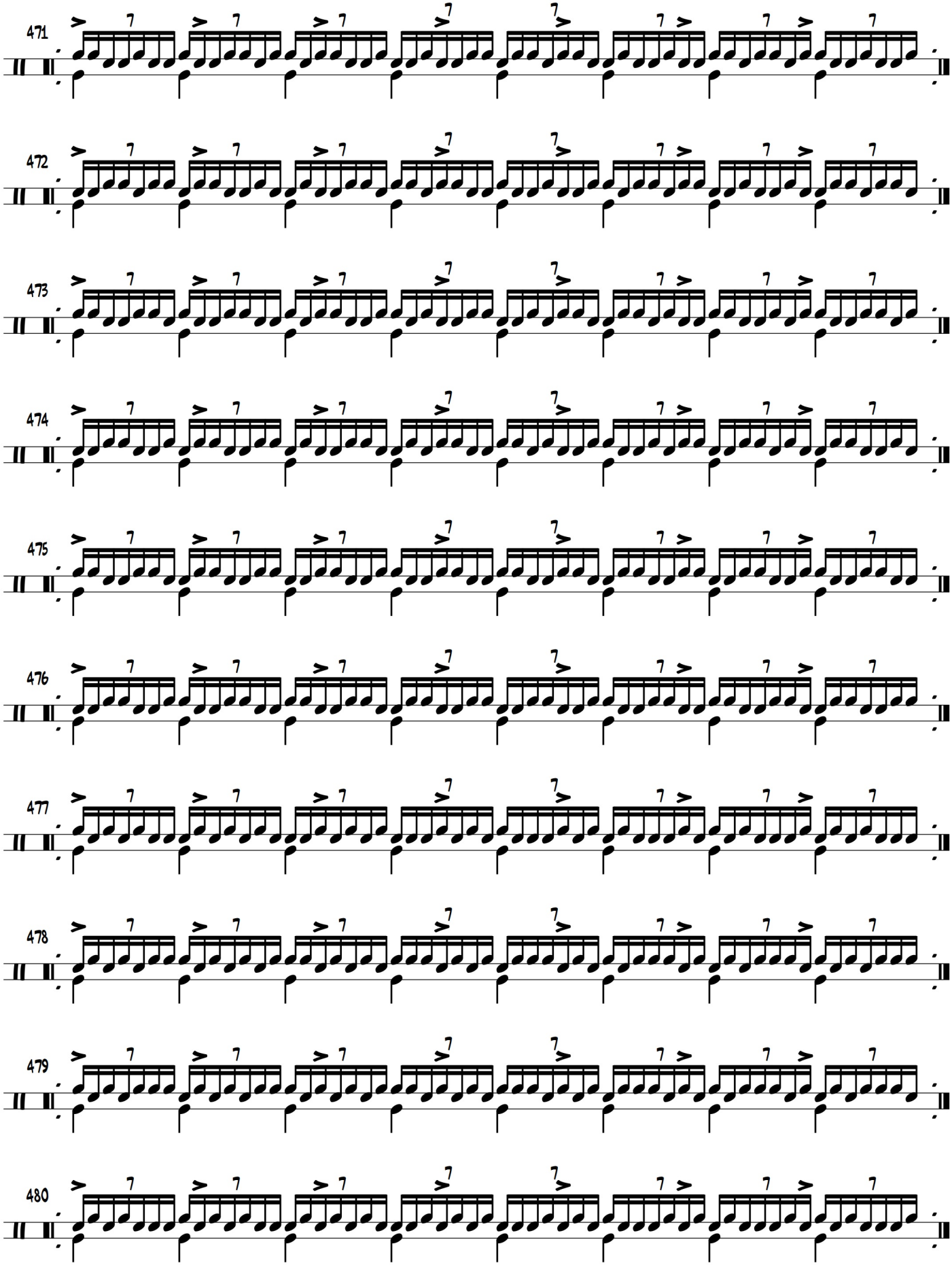
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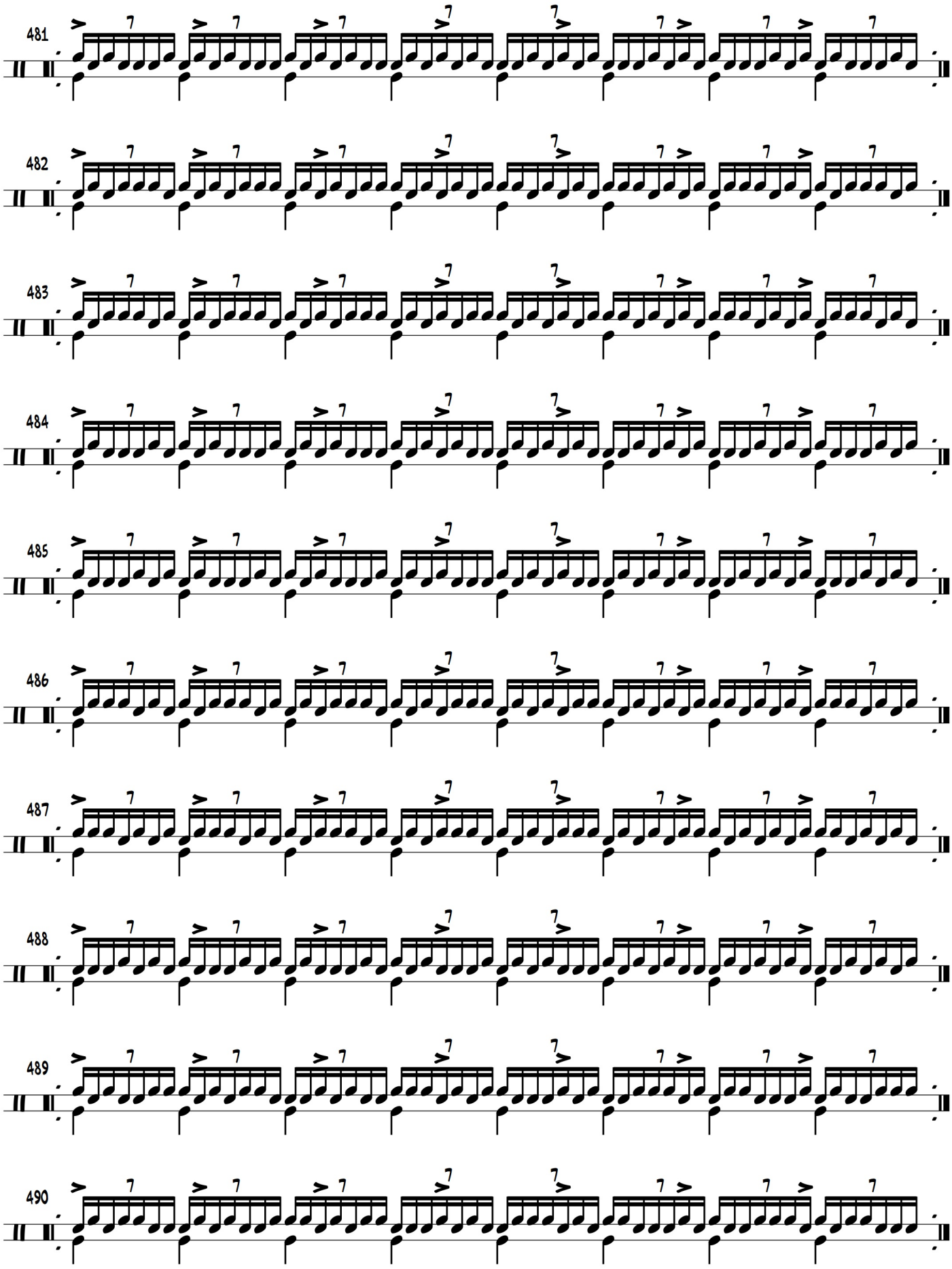
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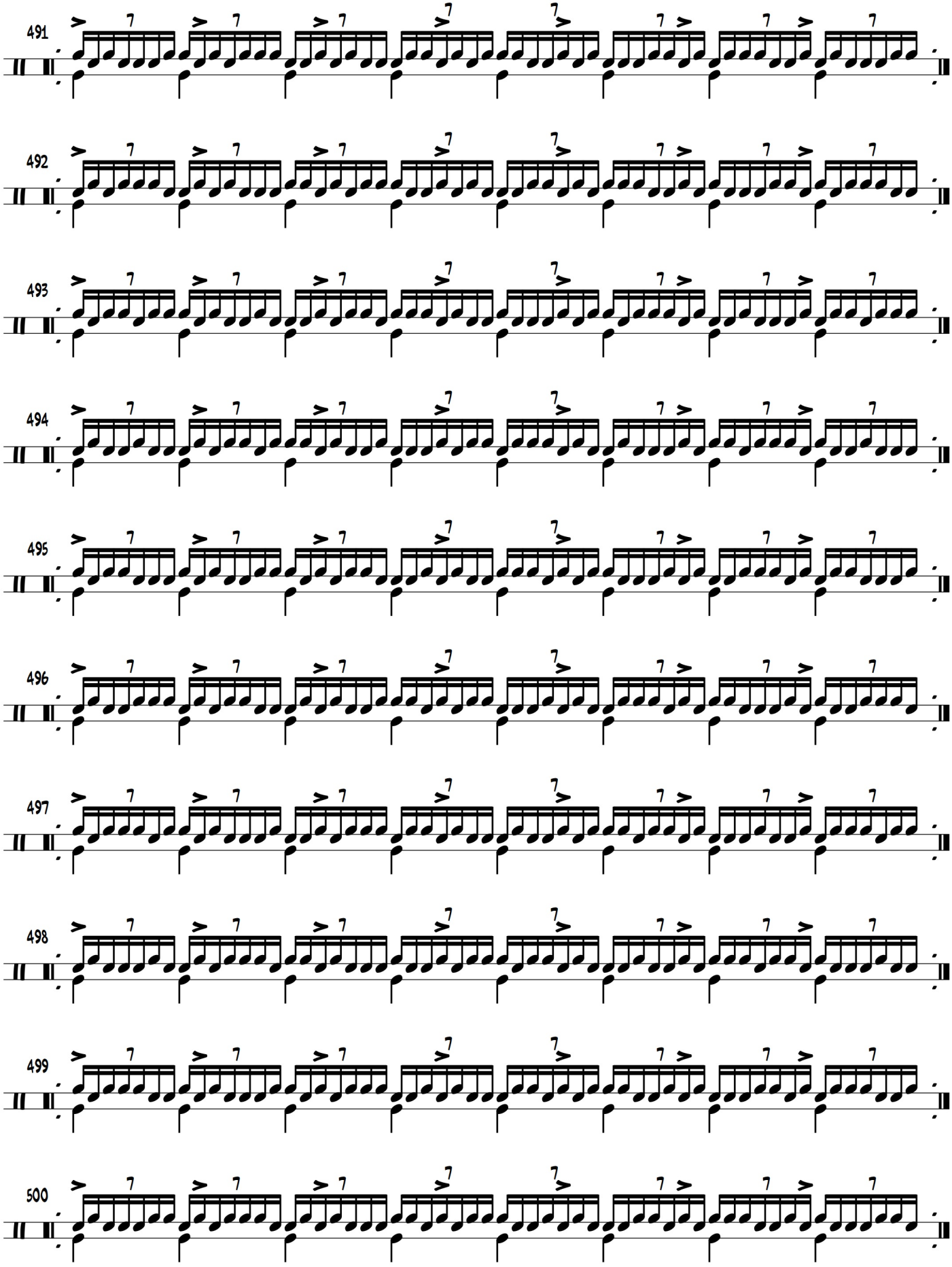
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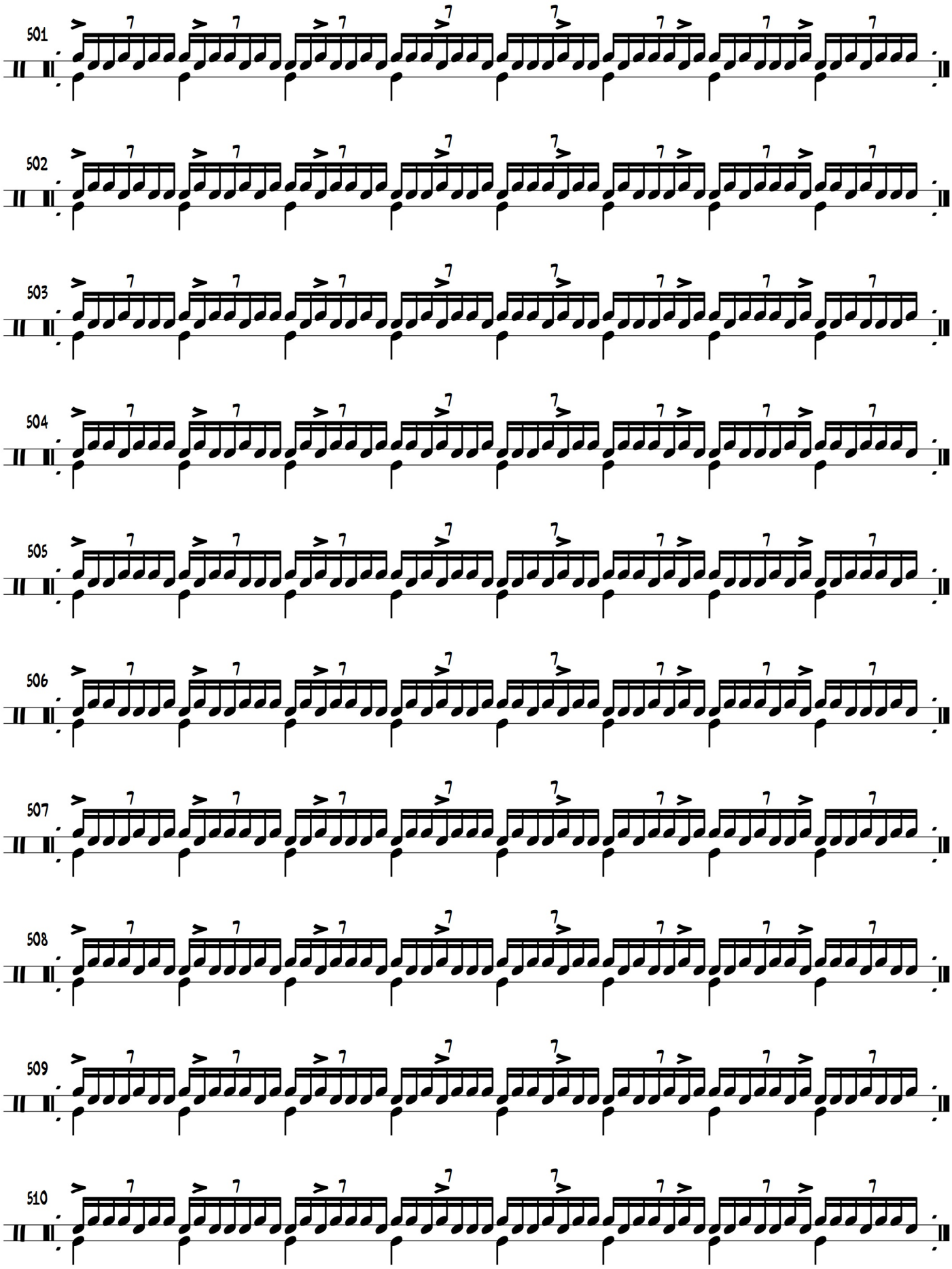
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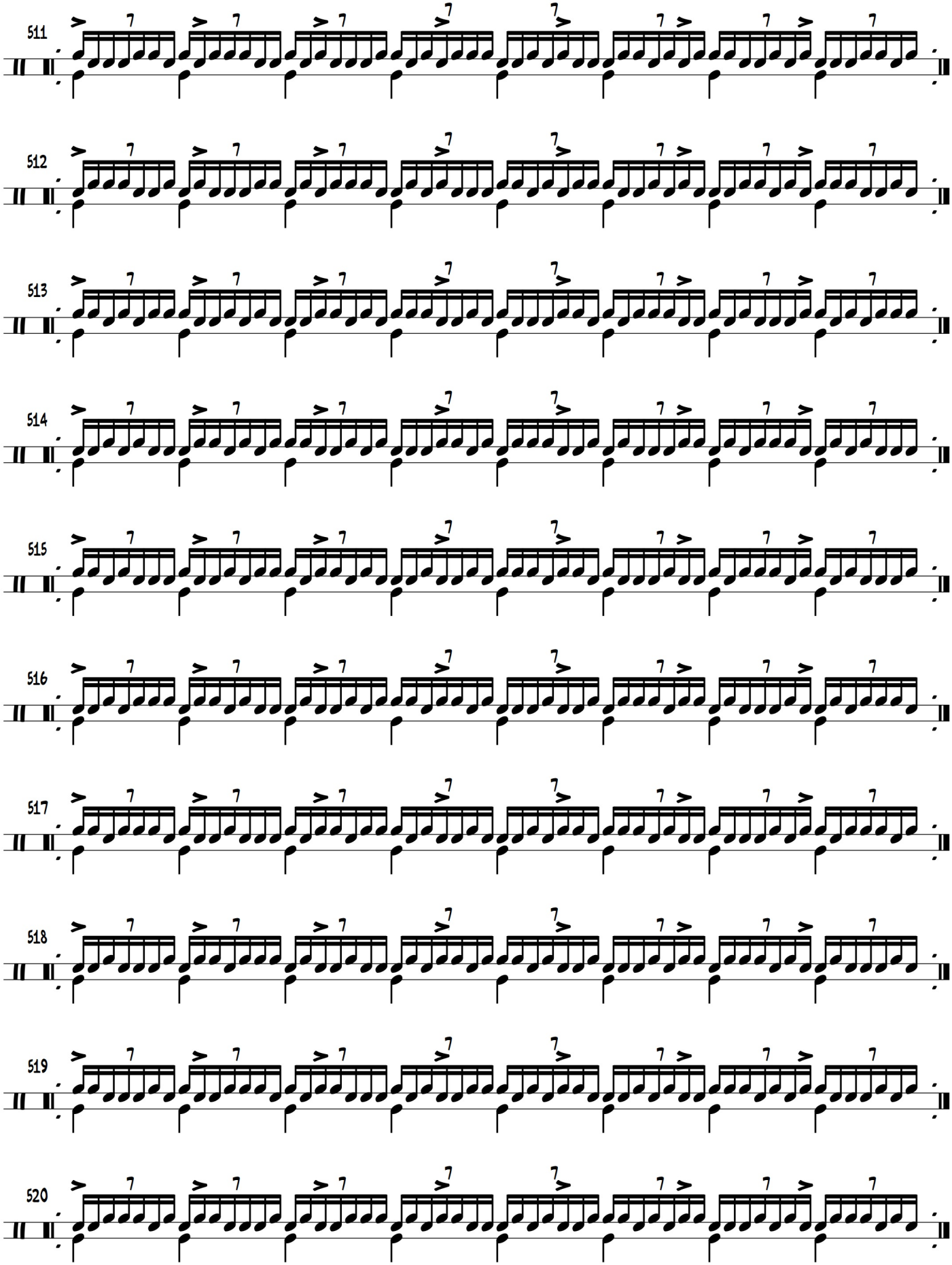
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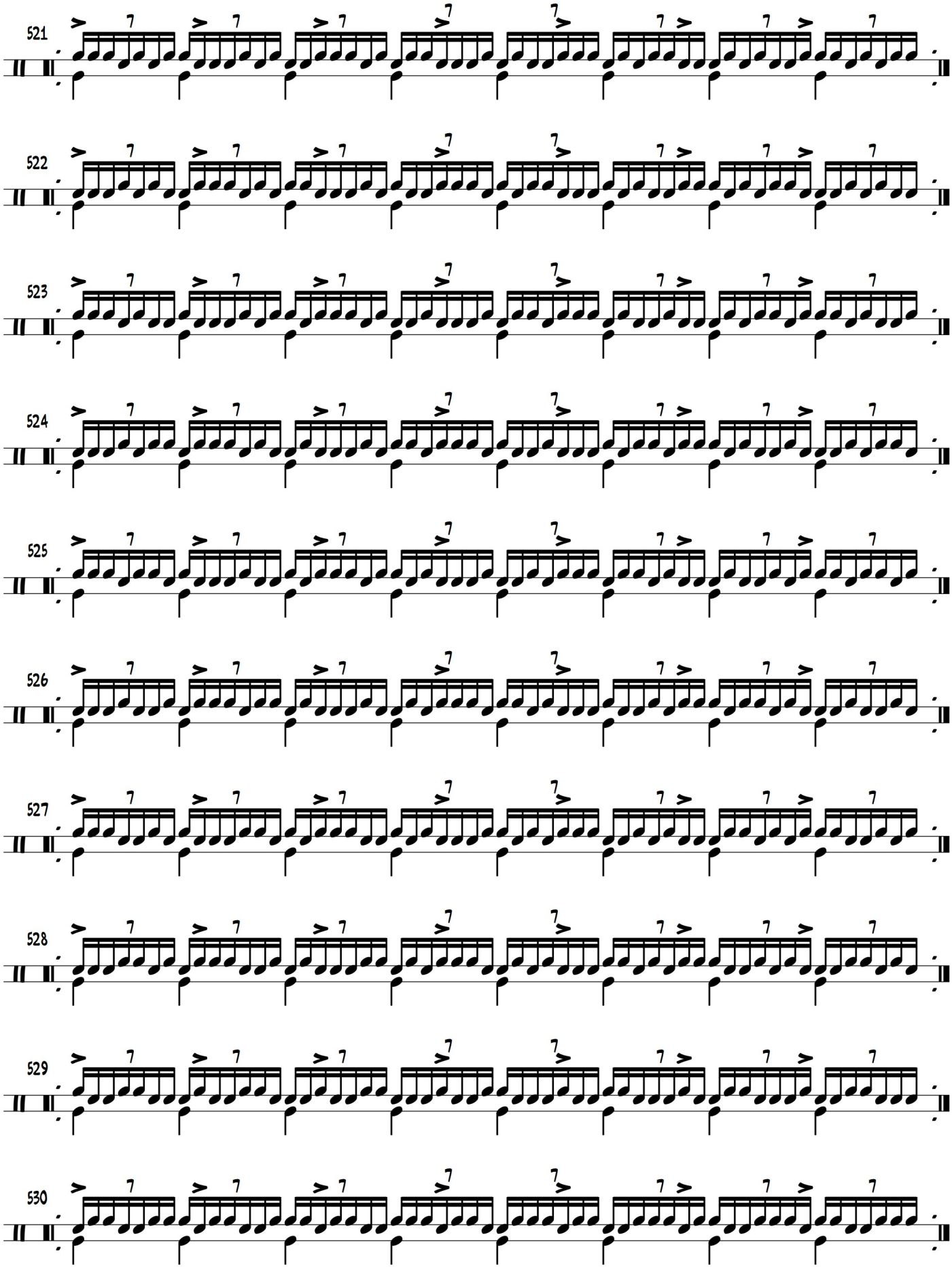
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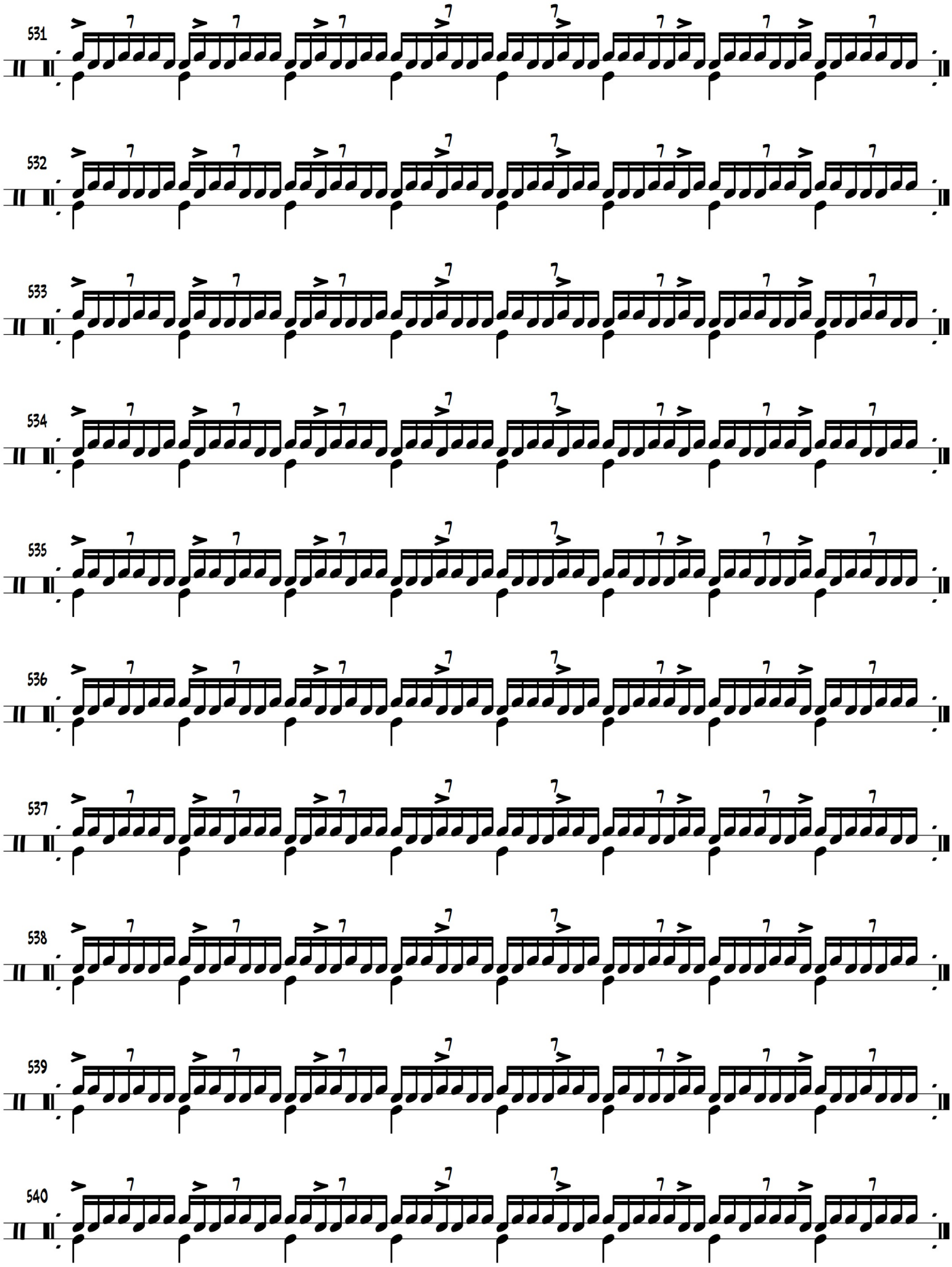
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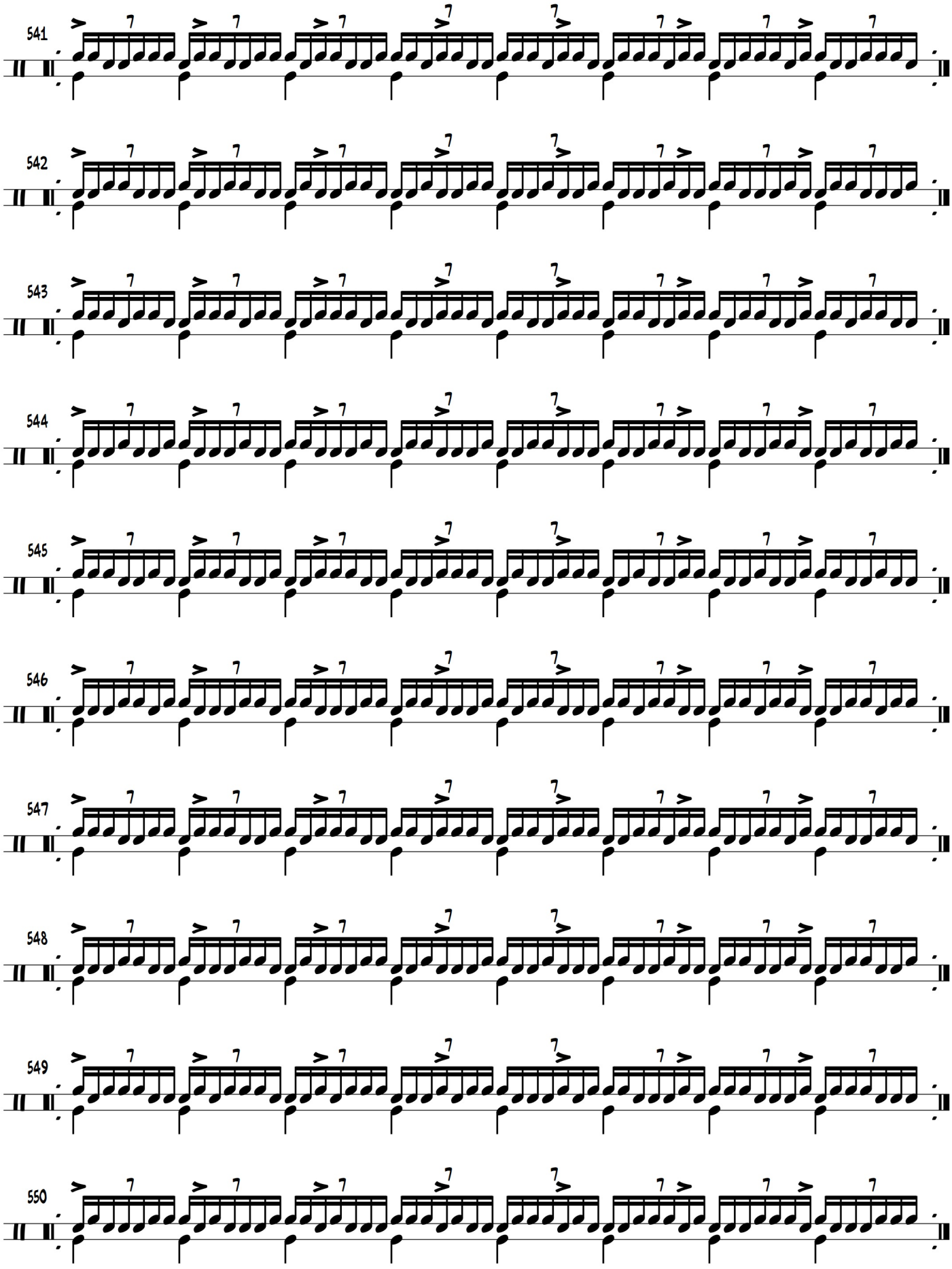
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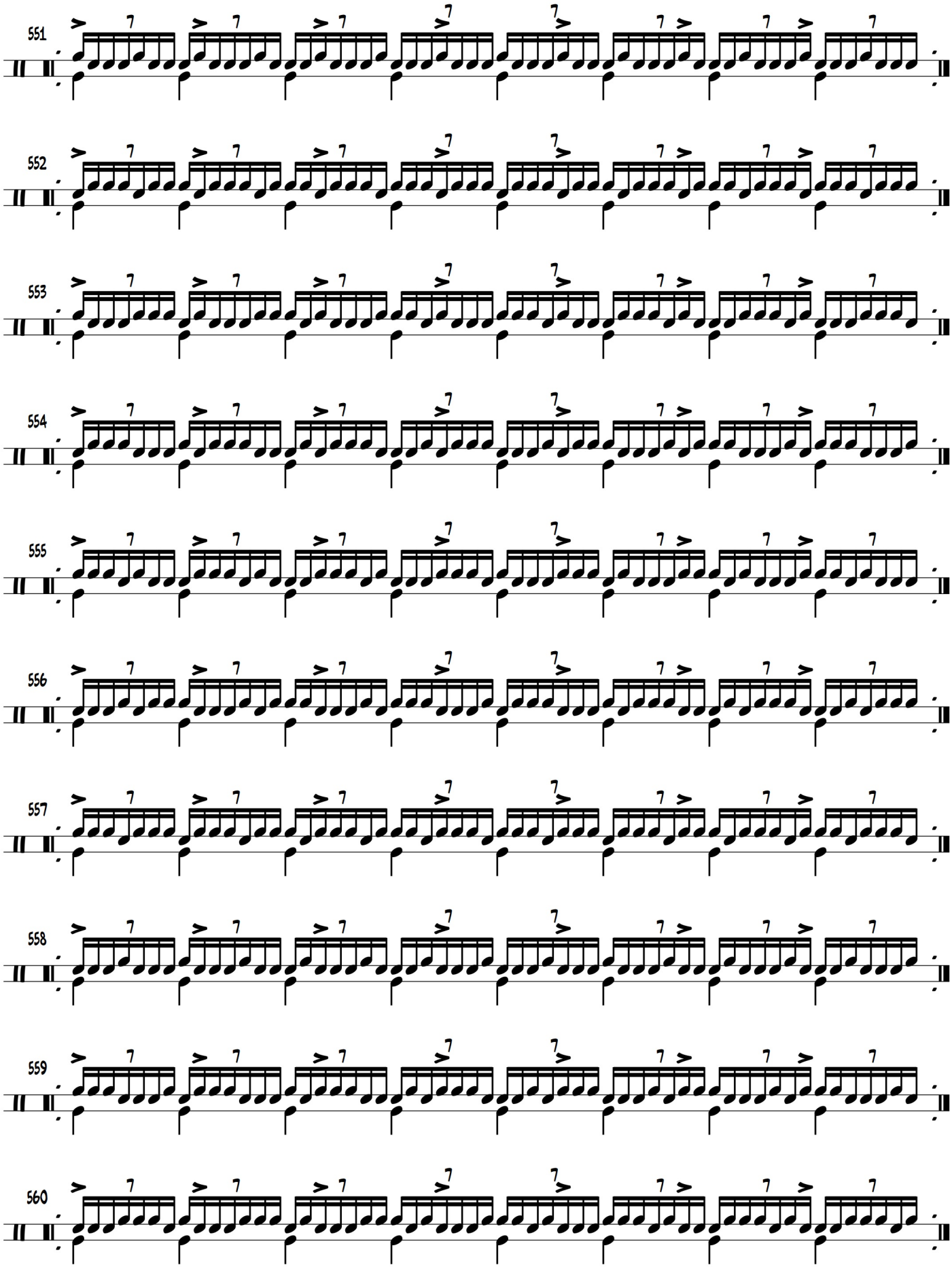
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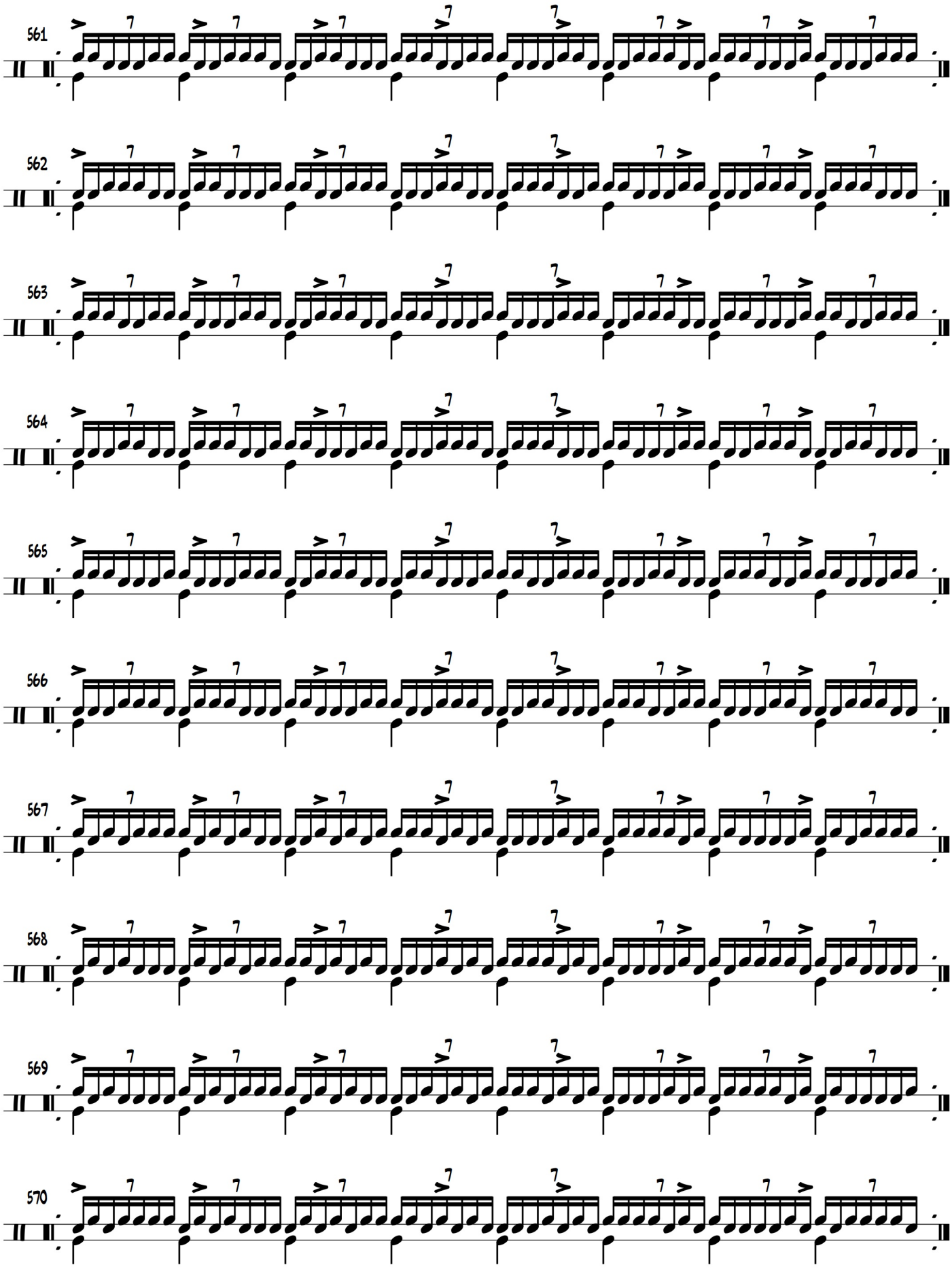
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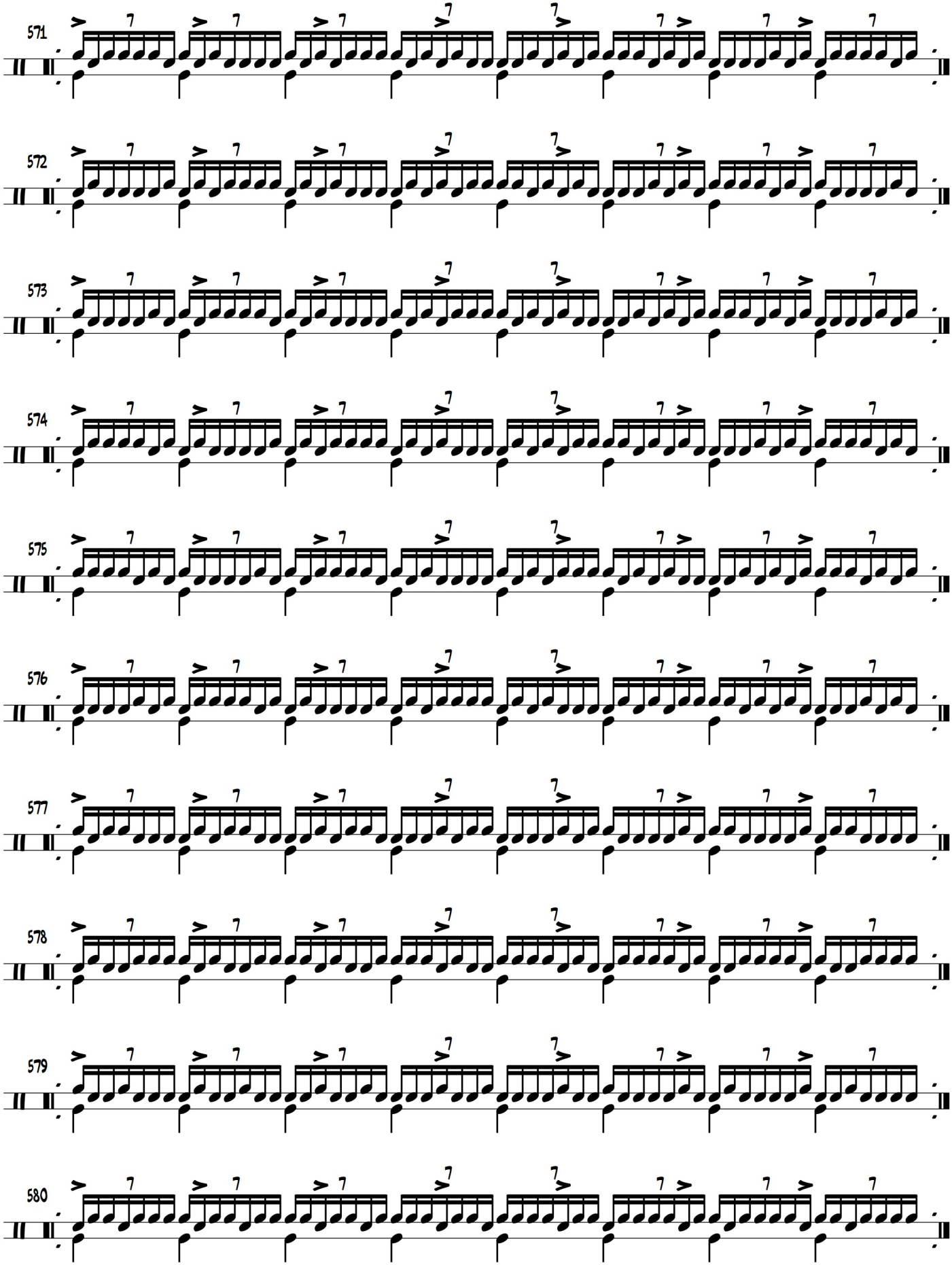
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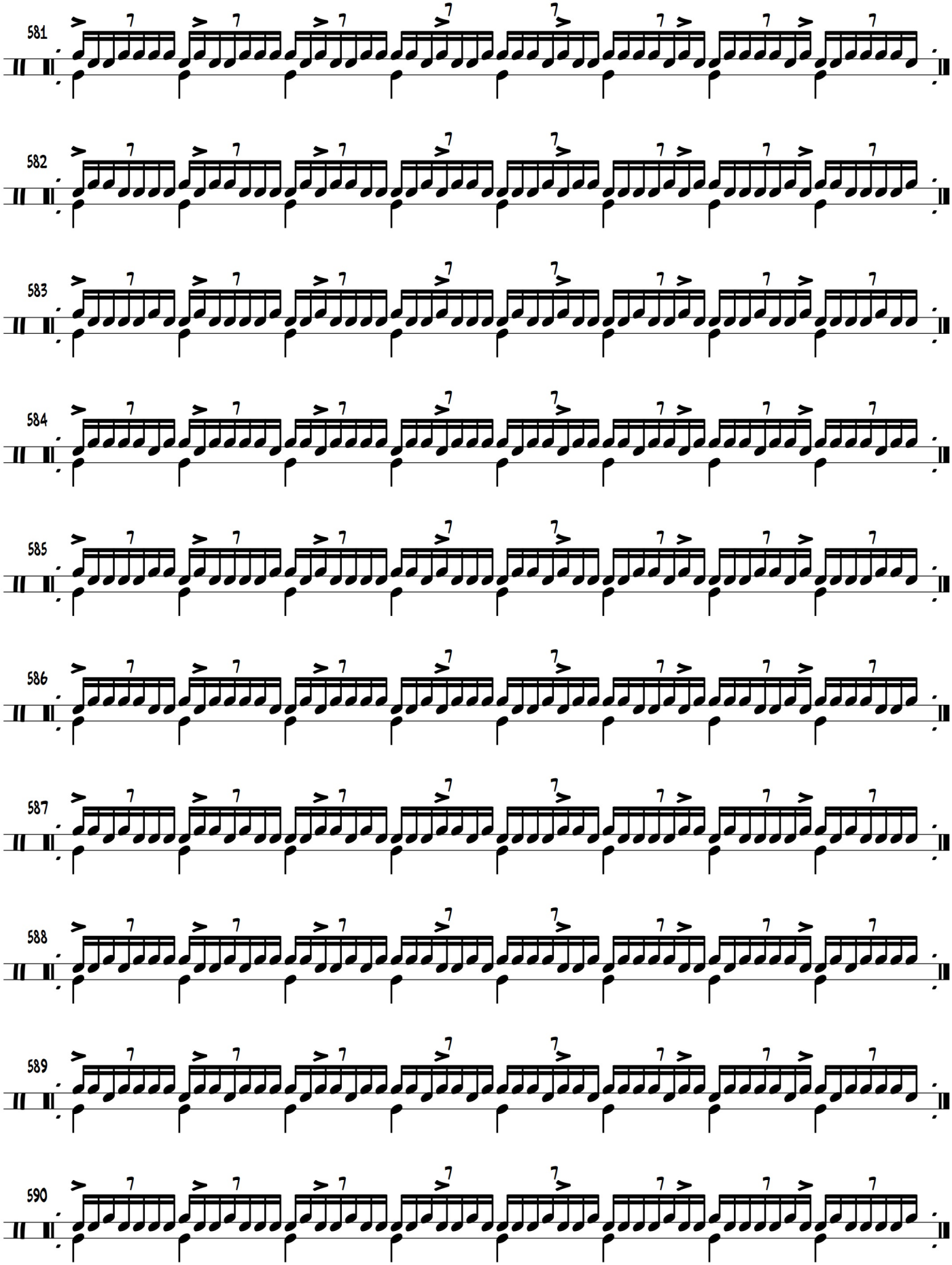
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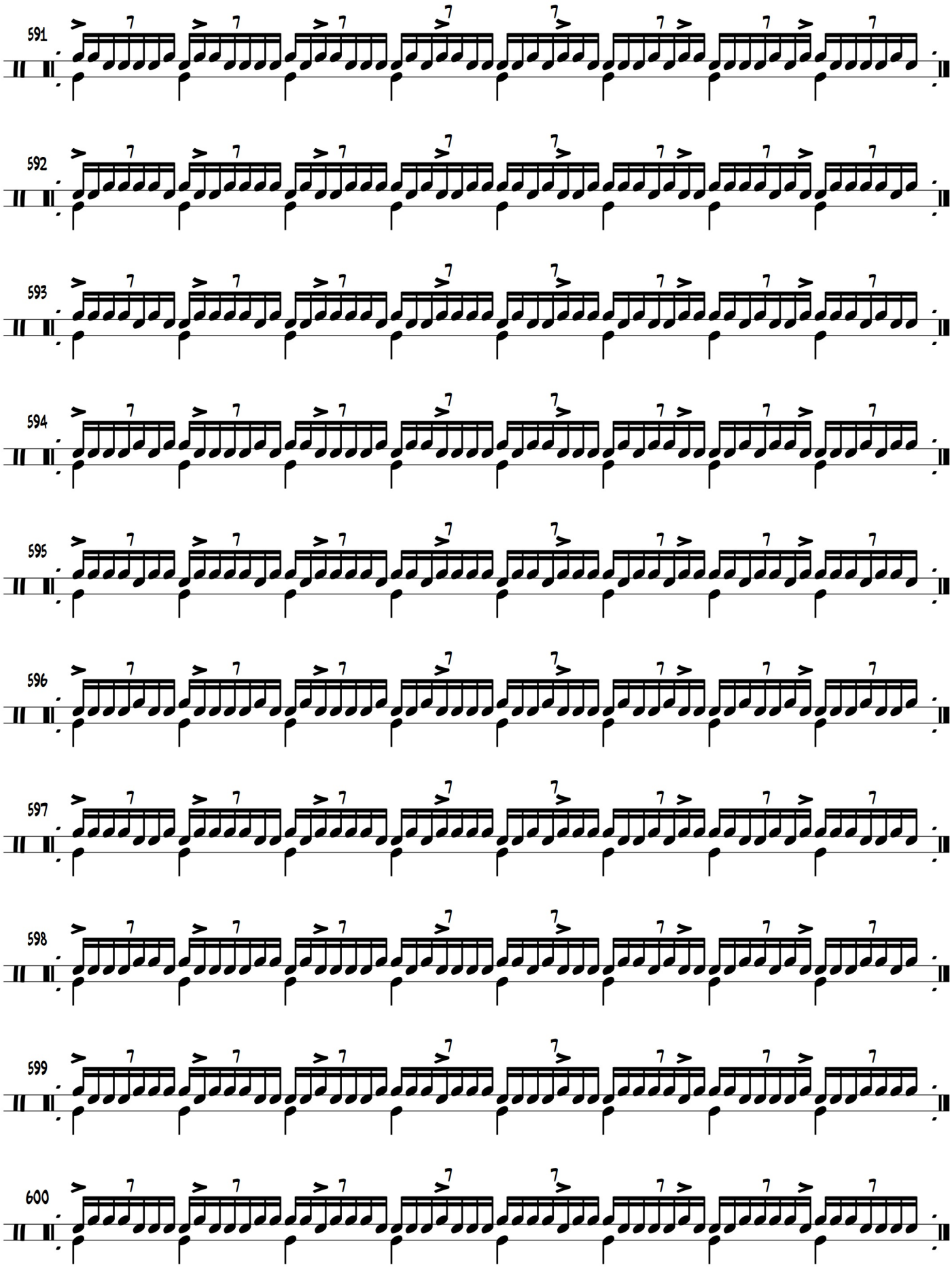
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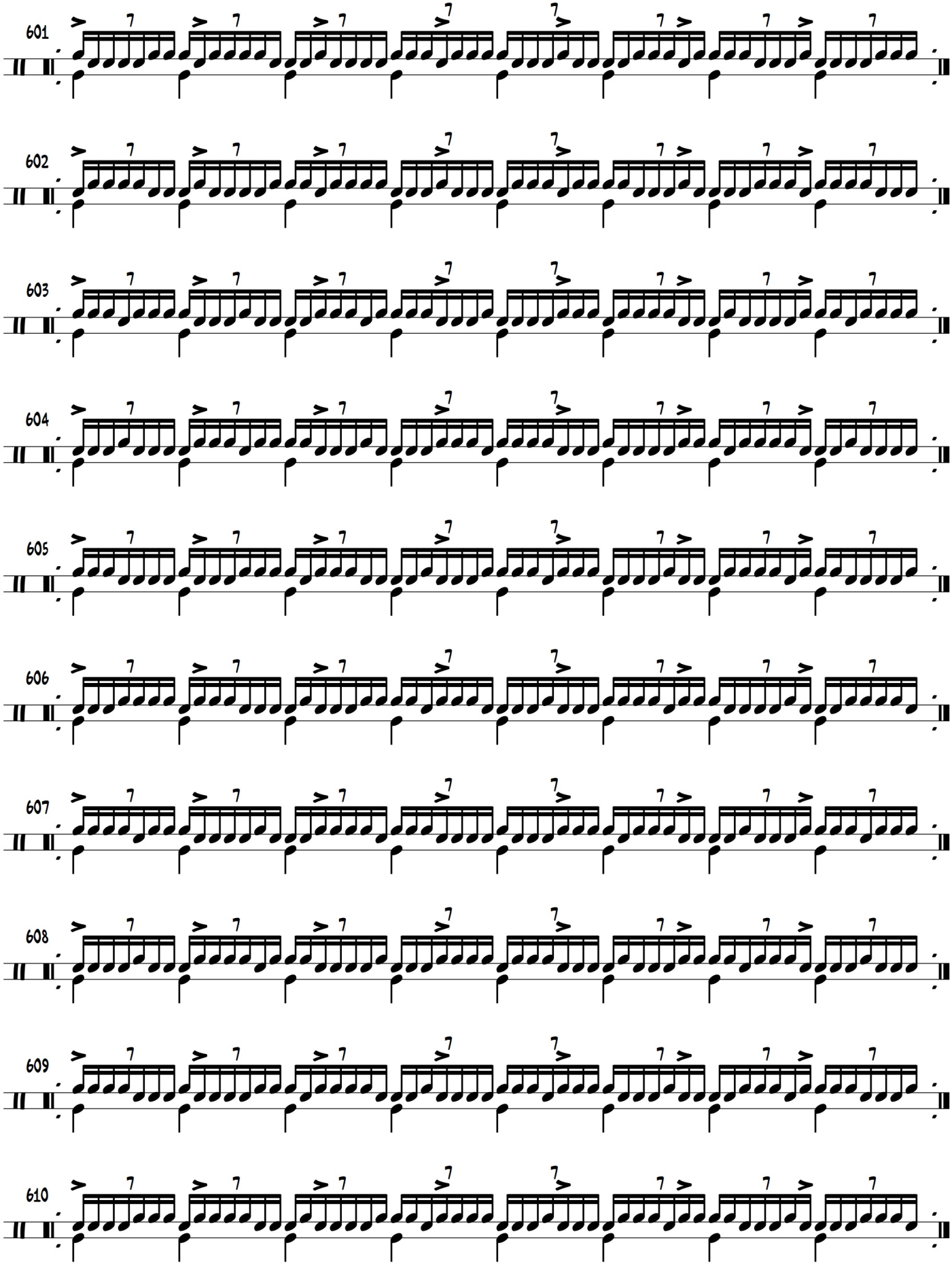
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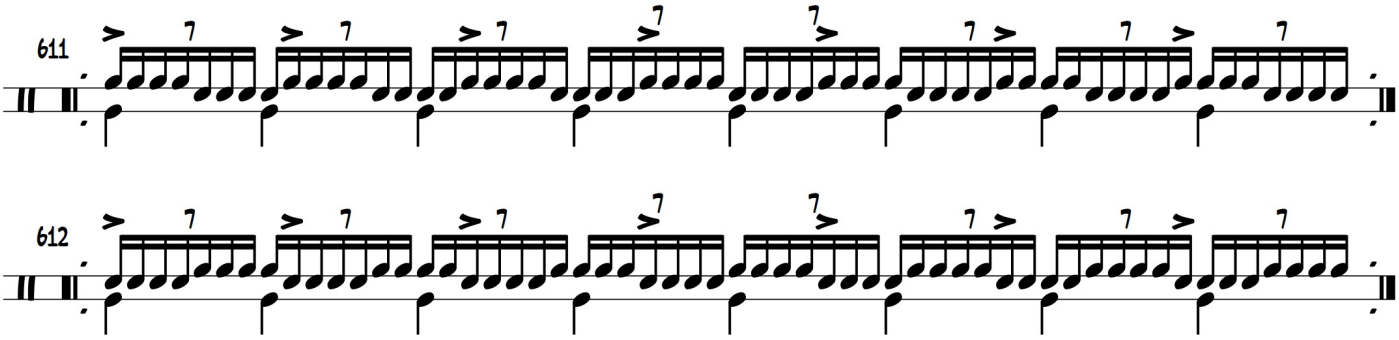
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Suggested Material

DVDs

- Jojo Mayer: "Secret Weapons For The Modern Drummer" series
- Steve Smith: "Drumset Technique/History Of The U.S. Beat", "Drum Legacy - Standing On The Shoulders Of Giants"
- Tommy Igoe: "Great Hands For A Lifetime"
- Gary Chaffee: "Phrasing And Motion", "Sticking Time, Linear Time, Rhythm And Meter"
- Thomas Lang: "Creative Control", "Creative Coordination"
- Benny Greb: "The Language Of Drumming", "The Art & Science Of Groove"

Books

- Dom Famularo & Joe Bergamini: "It's Your Move", "Pedal Control"
- Gary Chaffee: "Patterns" series

About the Author

Gianpaolo Gallian started drumming at the age of 9. He soon began studying Percussion Instruments at the Conservatory of Music in Rovigo (IT), which he attended for 8 years. After that, he switched to private drum studies, attending several seminars and drum events across the country. He came back to academical studies in 2009, graduating cum laude in Jazz Musical Disciplines (BD). As a drummer, he has played in many different musical situation, from Top 40 to contemporary jazz-fusion to contemporary pop-rock, touring around Italy and Europe, while recording as a session player for some studios, and teaching privately. He currently teaches privately and studies for his Master's Degree in Jazz Musical Disciplines. He authored the works "Drumset in Mathematics - An Invaluable Companion in Studies", "Drumset in Mathematics - The Applications", "Time Awareness - Vol. 1 | Go-Everywhere Exercises to Improve Your Sense of Time" & "Gary Chaffee's "Hand-Foot Patterns" - Systems for Practice", all available on Scribd.com and Archive.org, or through his personal website.

For more information, please visit the author's website at

http://gianpaologallian.blogspot.com